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FILE 'REGISTRY' ENTERED AT 14:29:40 ON 23 JUN 2010
               EXP HEPARIN
               EXP HEPARIN/CN
              1 S E3
              EXP LEUCINE/CN
             2 S E3
    FILE 'HCAPLUS' ENTERED AT 14:30:18 ON 23 JUN 2010
           109 S L1 AND L2
        856946 S POWDER OR INHALER OR ASTHMA OR PULMONARY OR BRONCHITIS OR (CY
L4
            14 S L3 AND L4
          45532 S L2
          1025 S L4 AND L6
L8
         66856 S INHAL?
           137 S L7 AND L8
L10
       1253967 S FINE OR PARTICLE
L11
           113 S L9 AND L10
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50 S L11 AND (PY<2004 OR AY<2004 OR PRY<2004)

44 S L12 NOT L5

L1

L2

L3

L5

L6

L7

L9

L12

L13

=> file reg COST IN U.S. DOLLARS SINCE FILE TOTAL OFFILE STIMATED COST 0.22 0.22

FILE 'REGISTRY' ENTERED AT 14:29:40 ON 23 JUN 2010
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STRUCTURE FILE UPDATES: 22 JUN 2010 HIGHEST RN 1228216-77-0 DICTIONARY FILE UPDATES: 22 JUN 2010 HIGHEST RN 1228216-77-0

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TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

```
=> exp heparin
                    HEPAREMIN/BI
E1
             1
E2
              1
                    HEPAREXINE/BI
E3
           1510 --> HEPARIN/BI
E4
             3 HEPARINA/BI
E5
             1
                   HEPARINADSORBER/BI
E6
            11
                   HEPARINAMIDE/BI
E7
            28
                   HEPARINASE/BI
E8
            14
                   HEPARINATE/BI
E9
             2
                   HEPARINE/BI
             1 HEPARINIC/BI
1 HEPARINIZED/BI
E10
E11
E12
                    HEPARINOID/BI
=> exp heparin/cn
E1
                    HEPAREMIN/CN
             1
E2
                    HEPAREXINE/CN
              1
E3
              1 --> HEPARIN/CN
E4
              1
                   HEPARIN (PHYSARUM POLYCEPHALUM STRAIN LU-353)/CN
E5
                    HEPARIN 3-PYRIDYLMETHYL ESTER/CN
              1
                    HEPARIN 4-HYDROXY-N, N-DIMETHYLBUTYRAMIDE/CN
E6
              1
                   HEPARIN 4-HYDROXY-N, N-DIMETHYLBUTYRAMIDE,
HEPARIN ACETATE/CN
HEPARIN ACETYLGLUCOSAMINE DEACETYLASE/CN
HEPARIN AFFIN REGULATORY PEPTIDE/CN
HEPARIN BENZETHONTUM SALT/CN
              1
E7
             1
E8
E9
              1
              1
E10
E11
              1
                    HEPARIN BENZYL ESTER/CN
E12
              1
                    HEPARIN BENZYL ESTER SODIUM SALT/CN
=> s e3
              1 HEPARIN/CN
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=> exp leucine/cn
                    LEUCINANTLIDE/CN
              1
E2
                    LEUCINANILIDE, N-PHOSPHONO-L-ALANYL-, BIS(P-NITROBENZYL) EST
                    ER, L-/CN
              2 --> LEUCINE/CN
E3
E4
              1
                   LEUCINE B-NAPHTHYLAMIDASE/CN
E5
                   LEUCINE 2,2,2-TRICHLOROETHYL ESTER/CN
             1 LEUCINE 2,3-AMINOMUTASE/CN
1 LEUCINE 2-BROMOETHYL ESTER HYDROCHLORIDE/CN
1 LEUCINE 2-NAPHTHYLAMIDASE/CN
E6
E7
E8
E9
                   LEUCINE 2-NAPHTHYLAMIDE/CN
E10
                   LEUCINE 2-OCTYLDODECYL ESTER/CN
E11
                   LEUCINE 2-OXOGLUTARATE TRANSAMINASE/CN
E12
                   LEUCINE 3-PHENYL-2-THIOHYDANTOIN/CN
=> s e3
T. 2
              2 LEUCINE/CN
=> file hcaplus
COST IN U.S. DOLLARS
                                                      SINCE FILE
                                                                       TOTAL
                                                           ENTRY
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11.49

11.71

FILE 'HCAPLUS' ENTERED AT 14:30:18 ON 23 JUN 2010
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FILE COVERS 1907 - 23 Jun 2010 VOL 152 ISS 26
FILE LAST UPDATED: 22 Jun 2010 (20100622/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2010
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HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

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http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s 11 and 12
31508 L1
45532 L2
L3 109 L1 AND L2
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FULL ESTIMATED COST

=> s powder or inhaler or asthma or pulmonary or bronchitis or (cystic fibrosis) or bronchiectasis

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681738 POWDER
  2972 INHALER
 49121 ASTHMA
120899 PULMONARY
 9073 BRONCHITIS
 21381 CYSTIC
 54922 FIBROSIS
 16173 CYSTIC FIBROSIS
         (CYSTIC(W)FIBROSIS)
  1050 BRONCHIECTASIS
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L4 856946 POWDER OR INHALER OR ASTHMA OR PULMONARY OR BRONCHITIS OR (CYSTI C FIBROSIS) OR BRONCHIECTASIS

=> s 13 and 14 14 L3 AND L4

=> d 15 1-14 ti abs bib

ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN

ΤI Development of inhalable formulations of anti-inflammatory drugs to potentially treat smoke inhalation injury in burn victims

AB Injury arising from smoke inhalation is a significant mortality risk in severe burned patients. Inflammatory processes are major contributors to the development of respiratory insufficiency owing to pulmonary edema, formation of airway fibrin clots and hypoxemia. Anti-inflammatory and anti-coagulant drugs such as heparin and pentoxifylline are currently systemically administered for the treatment of smoke inhalation. Delivery of these drugs in the form of inhalable particles could be an effective manner to achieve rapid targeted action for acceleration of the treatment. The study developed and characterized a series of spray-dried heparin and pentoxifylline dry powder formulations suitable for inhalation administration. Drug particles were co-spray-dried with leucine in varying ratios. Particle size anal. confirmed all powders (except 2%, weight/weight, pentoxifylline with 1%, weight/weight, leucine in spray-drying

feed

solution) had particle size in the optimal range (≤5 µm) for deep lung drug deposition. Leucine supplementation dramatically altered heparin surface topog, while pentoxifylline formulations were a mixture of elongated needles interspersed with wrinkly particles. Addition of leucine improved fine particle fraction of heparin and pentoxifylline. The study indicated manufacture of inhalable heparin and pentoxifylline was feasible and can potentially be an attractive delivery alternative to the more conventional systemic delivery route.

2010:287685 HCAPLUS <<LOGINID::20100623>>

AN DN 152:534349

ΤТ Development of inhalable formulations of anti-inflammatory drugs to potentially treat smoke inhalation injury in burn victims

Thai, A.; Xiao, J.; Ammit, A. J.; Rohanizadeh, R. AU

CS Advanced Drug Delivery Group, Faculty of Pharmacy (A15), University of Sydney, Sydney, NSW, 2006, Australia

International Journal of Pharmaceutics (2010), 389(1-2), 41-52 SO CODEN: IJPHDE; ISSN: 0378-5173

PB Elsevier B.V. DT Journal

LA English RE.CNT 43

THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L.5 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN

ΤТ Liposomal dispersion and dry powder formulations comprising oligonucleotides having improved downstream processing properties

- AB A pharmaceutical composition comprises: (A) one or more drug substances; (B) a lipid; (C) a co-lipid; and (D) a flowability enhancer, wherein the co-lipid and the flowability enhancer together form a liposomal dispersion that comprises lipid vesicles that encapsulate the one or more drug substances. The pharmaceutical composition is optionally dried to form a dry powder formulation that is free-flowing and preferably suitable for inhalation or nasal administration. A composition contains oligonucleotide A, which is an immunomodulatory oligonucleotide or immunomer with TLR9 agonist activity that is useful in the treatment of allergic inflammatory diseases, hydrogenated phosphatidylcholine, pegylated phosphatidylcholine, Ca phosphate, lactic acid, mannitol, bovine serum albumin and phosphate buffer salt.
- AN 2009:260561 HCAPLUS <<LOGINID::20100623>>
- DN 150:290754 ТΤ Liposomal dispersion and dry powder formulations comprising
- oligonucleotides having improved downstream processing properties Eskandar, Fadi TN
- PA Novartis A.-G., Switz.
- PCT Int. Appl., 62pp. SO
- CODEN: PIXXD2 DТ Patent
- LA English FAN. CNT 1

PAN.		rent :	NO.			KIN	D	DATE			APPL					D	ATE	
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PI	WO	2009	0273	37		A1		2009	0305		WO 2	008-1	EP61	018		2	0080	822
		W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
			CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
			FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,
			KG,	KM,	KN,	KΡ,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
			ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,
			PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,	TJ,
			TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW		
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
			IE,	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,
			TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
			AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	ΤJ,	TM							
PRAI	EP	2007	-114	981		A.		2007	0824									
	EP	2007	-123	163		A		2007	1213									
RE.C	NT	13	TH	ERE	ARE	13 C	ITED	REF	EREN	CES .	AVAI	LABL	E FO	R TH	IS R	ECOR	٥	

- ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L5 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN
- TΙ Cospray-dried unfractionated heparin with L-leucine as a dry powder inhaler mucolytic for cystic fibrosis therapy
- AB Accumulation of inspissated secretions that are difficult to clear and congest the airways is a feature of lung disease in patients with cystic fibrosis (CF). These secretions restrict airflow, harbor infection and limit the delivery of inhaled drugs including gene therapy vectors to the underlying target cells. Unfractionated heparin (UFH) has mucolytic properties suggesting that it may be a useful therapeutic agent for lung disease in these patients. For the pulmonary delivery of UFH to patients with CF, the dry powder inhaler has potential advantages over systems using nebulized suspensions. However, spray-dried particles in the appropriate size range (1-5 m) may absorb atmospheric moisture, causing aggregation. UFH was cospray-dried with L-leucine (1%) to produce particles that are less cohesive than UFH alone and show good aerosolization performance. Rheol. anal. showed that spray-dried UFH and

UFH cospray-dried with L-leucine significantly reduce the elasticity and yield stress of CF sputum. The superior phys. properties of UFH/L-leucine indicate this is the preferred formulation for development as an inhaled mucolvtic.

- AN 2008:1343290 HCAPLUS <<LOGINID::20100623>>
- DN 150:83600
- TT Cospray-dried unfractionated heparin with L-leucine as a dry powder inhaler mucolytic for cystic

fibrosis therapy

- Shur, Jacdeep; Nevell, Thomas G.; Ewen, Richard J.; Price, Robert; Smith, Andrew; Barbu, Eugen; Conway, Joy H.; Carroll, Mary P.; Shute, Janis K.; Smith, James R.
- CS School of Pharmacy and Biomedical Sciences, Institute of Biomedical and Biomolecular Science, University of Portsmouth, Portsmouth, PO1 2DT, UK Journal of Pharmaceutical Sciences (2008), 97(11), 4857-4868 SO
- CODEN: JPMSAE; ISSN: 0022-3549
- Wiley-Liss, Inc. PR
- DT Journal
- English LA
- OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS) RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
- ALL CITATIONS AVAILABLE IN THE RE FORMAT
- ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN
- Inhaler devices and bespoke pharmaceutical compositions
- AB The present invention relates to inhaler devices and bespoke

pharmaceutical dry powder composition to be dispensed using such inhaler devices for pulmonary administration. In

particular, the present invention relates to the provision of passive

inhaler devices and dry powder compns. which are

specifically formulated and prepared to be efficiently dispensed by such

devices to reproducibly achieve a high delivered dose of the pharmaceutically active agent. Thus, blends containing 5% or 10% budesonide and magnesium stearate were obtained by mechanofusion carried out for 60

- min at approx. 4000 rpm, resulting in a high aerosolization efficiency. AN 2008:555538 HCAPLUS <<LOGINID::20100623>>
- DN 148:523645
- ΤI Inhaler devices and bespoke pharmaceutical compositions
- IN Morton, David
- PA Vectura Group PLC, UK
- PCT Int. Appl., 113pp. SO
- CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

	PA:	TENT :	NO.			KIN	D	DATE			APPL	ICAT:	ION I	NO.		D2	ATE	
PI		2008				A2 A3		2008 2008			WO 2	007-	GB50	674		2	0071	105
		W:						AU, CZ,										
								GT, LA,										
								MY,										
								SD, US,							SY,	TJ,	TM,	TN,
		RW:						CZ,							GB,	GR,	HU,	IE,
								MC,										
								GΑ,										
			GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,

BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

EP 2086523 A2 20090812 EP 2007-824886 20071105
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR
PRAI GB 2006-21597 A 20061103
W0 2007-G6B50674 W 20071105

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

- L5 ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Aerodynamically light porous dry powder inhaler
- formulations for targeted pulmonary deposition ALPDPI formulations having targeted and enhanced pulmonary deposition with prolong residence time, method of preparation and administration thereof are provided for the prophylaxis/treatment/diagnosis of various pulmonary and systemic disorders. In a preferred embodiment, the ALPDPI formulations are made of a biodegradable, biocompatible material/s and have a tap d. less than 0.4 g/cm3, a geometric diameter between 5 m and 30m. The ALPDPI formulations are comprising of bioactive agent encapsulated or complexed or micro or nanosize in the form of or within vesicles/particles such as liposomes, lipid complexes, solid lipid microparticles, solid lipid nanoparticles, solid lipid complexes, polymeric microparticles or nanoparticles bioactive agent particles such as microparticles or nanoparticles or nanocrystals or nanosuspension or combination thereof which are dispersed in additive materials solution or dispersion before processing such as carbohydrates/polyols/hydrolyzed gelatin with or without amino acid or a mixture of amino acid/s, or surfactant/s such as natural/synthetic phospholipid/s, tween/s, span/s, poloxamer/s, protease inhibitors and permeation enhancers etc., alone or in combinations thereof. The ALPDPI formulations comprising of vesicles/particles offers advantage of altering favorably the pharmacokinetic profile of the bioactive agent/s which helps in effective management of pulmonary and systemic disorders. The ALPDPI formulations of bioactive agent/s may be effectively aerosolized alone or co-administered with coarse carrier for administration having enhanced FPF/respirable fraction to the specific sites of lungs in the effective prophylaxis/treatment/diagnosis of pulmonary or systemic disorders by using a high/medium/low
- AN 2007:393843 HCAPLUS <<LOGINID::20100623>>
- DN 148:85834
 - TI Aerodynamically light porous dry powder inhaler formulations for targeted pulmonary deposition
 - IN Ambikanandan, Misra; Bhupal, Chougule Mahavir; Ganesh, S.; Kumar, Padhi Bijav
 - PA India
 - SO Indian Pat. Appl., 30pp.

resistance device.

- CODEN: INXXBQ
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	IN 2006MU00953	A	20060630	IN 2006-MU953	20060615
PRAT	TN 2006-MH953		20060615		

- L5 ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Dry powder inhaler formulations comprising
- surface-modified particles with anti-adherent additives
- AB The present invention is concerned with a refinement of the processing of particles that are to form a dry powder formulation which is to be administered to the lung using a dry powder inhaler (DPI) device. In particular, the present invention provides the

processing of particles of active material, e.g., steroids, bronchodilators, B2-agonists, antimuscarinics, antihistamines, anti-inflammatory agents, etc., and particles of carrier material in the presence of additive material to provide a powder composition which exhibits excellent powder properties and which is economical to produce. Thus, a blend of micronized budesonide 5%, magnesium stearate (force control agent) 6%, and Sorbolac 400 89% was prepared by Mechanofusion at approx. 4000 rpm for 60 min or in a conventional food-processor style bladed mixer, with 2 parallel blades at 2000 rpm for 20 min. The blend obtained in the food-processor mixer gave lower fine particle fractions (FFFS), when compared to that of the mechanofused blend.

AN 2006:513206 HCAPLUS <<LOGINID::20100623>> DN 145:14730

TI Dry powder inhaler formulations comprising

surface-modified particles with anti-adherent additives

IN Morton, David

PA Vectura Limited, UK SO PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DT Patent LA English FAN.CNT 1

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The present invention is directed to novel pharmaceutical compns. comprising nano- and micro-particulate formulations of poorly water soluble tubulin inhibitors (I; Rl = H, alkyl, alkylaryl, acyl, aryl; R2 = H, alkyl, aryl, arylaryl, aryl, alkoxycarbonyl, aryloxycarbonyl, cycloalkoxycarbonyl, etc.; R3-6 = H, alkyl, halogen; A,B,C,D = C, N; X = H, OH, halogen, alkyl, cycloalkyl, alkenyl, cycloalkeyl, carboxy, alkoxy, etc.). A tubulin inhibitor is preferably of the indole chemical class, N-substituted indol-3-glyoxyamides, and more preferably N-(pyridin-4-yl)-[1-(4-chlorobenzyl)-indol-3-yl)glyoxylic acid amide (D 24851, Indibulin). Methods of making and using such compns. for the treatment of anti-tumor agent resistant cancers and other diseases are also described. For example, a suspension of D-24851 was prepared by mixing an aqueous surfactant solution containing 0.14 sodium deoxycholate, 2.2%

glycerin,

and 0.142% dibasic sodium phosphate with a solution of D-24851 and Poloxamer 188 in lactic acid. The total suspension weight was 2000 g, with a drug concentration of approx. 1%. The suspension was homogenized, lactic acid was removed and the suspension was homogenized again to give a nanosuspension with the mean particle size of approx. 325 mm.

AN 2006:470314 HCAPLUS <<LOGINID::20100623>>

DN 144:495330

TI Nanoparticulate compositions of tubulin inhibitors for treatment of resistant cancers and other diseases

IN Papadopoulos, Pavlos; Doty, Mark; Kipp, James E.; Roessler, Berthold PAB Baxter International Inc., USA; Baxter Healthcare S.A.; Raab, Gerhard SO PCT Int. Appl., 79 pp.

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DT Patent

LA English FAN.CNT 1

PATENT NO. KIND APPLICATION NO. DATE DATE WO 2006052712 20060518 WO 2005-US39922 20051103 PΙ A1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, SS, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MM, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

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KG, KZ, MD, RU, TJ, TM
     AU 2005304952 A1 20060518 AU 2005-304952 CA 2587276 A1 20060518 CA 2005-2587276 LS 20060110462 A1 20060525 US 2005-266518 EP 1809279 A1 20070725 EP 2005-851335
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             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
             BA, HR, MK, YU
     CN 101090720 A
                               20071219 CN 2005-80037827
                                                                  20051103
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                                                                  20051103
                                                                  20070425
                                                                  20070507
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS MARPAT 144:495330
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 4
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
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- ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN
- TΙ
- Pharmaceutical compositions The present invention relates to pharmaceutical compns. which are useful in the treatment of diseases where excess mucus is present in the respiratory tract, such as cystic fibrosis and chronic obstructive pulmonary disease. In particular, the invention relates to pharmaceutical compns. for administration by pulmonary inhalation. Thus, in a first aspect of the present invention, a composition for assisting mucus clearance is provided, the composition comprising one or more mucoactive agents for reducing crosslinking within the mucus; for diluting the mucus; and/or for digesting naked DNA and cell debris within the mucus. Preferably, the composition according to the invention further has the effect of reducing inflammation. In one embodiment of the present invention, the composition comprises one or more mucoactive agents together with an addnl. active agent such as an anti-inflammatory agent. In a particularly preferred embodiment of the present invention, the mucoactive agent for reducing crosslinking is a glycosaminoglycan such as heparin. A further group of mucoactive agents capable of assisting mucus clearance are amino acids. Acetylcysteine (NAC) and the acetylcysteine salt derivative Nacystelyn (or NAL) are also effective mucoactive agents which are suitable for inclusion in the compns. of the present invention. 2005:259852 HCAPLUS <<LOGINID::20100623>>
- AN DN 142:329858

AB

- TI Pharmaceutical compositions
- IN Morton, David; Ganderton, David; Staniforth, John; Kamlag, Yorick
- PA Vectura Limited, UK
- SO PCT Int. Appl., 60 pp.
- CODEN: PIXXD2 DT Patent
- LA English FAN. CNT 1

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PI	WO 200			A2 A3		2005 2005			WO 2	004-	GB39	32	 2	0040	915
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						ID,									

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     BR 2004014425 A
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 7
             THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN
L5
TI
     Methods for preparing pharmaceutical compositions
AΒ
     The present invention relates to improvements in dry powder
     formulations comprising a pharmaceutically active agent for administration
     by inhalation, and in particular to methods of preparing dry powder
     compns. with improved properties. In particular, spray drying processes
     are adapted and adjusted to obtain active particles with higher fine
     particle fractions and fine particle doses. Spray drying 1% heparin from
     10% methanol, ethanol and propan-1-ol resulted in a lowering of fine
     particle fraction from approx. 20% when spray dried from aqueous solvent using
     identical parameters to 2-6% fine particle fraction.
AN
     2005:259847 HCAPLUS <<LOGINID::20100623>>
DN
    142:303679
ΤI
    Methods for preparing pharmaceutical compositions
IN Morton, David; Kamlag, Yorick
PA
     Vectura Limited, UK
SO PCT Int. Appl., 71 pp.
     CODEN: PIXXD2
DT
    Patent
LA English
FAN.CNT 8
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    US 20060292081
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PRAI GB 2003-21608
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    GB 2004-9133
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    WO 2004-GB3938
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
             THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 5
             THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
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- ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN
- ΤI Compositions and methods for the pulmonary delivery of
- aerosolized medicaments AB According to the subject invention, dispersible dry powder pharmaceutical-based compns. are provided, including methods for their manufacture and dry powder dispersion devices. A dispersible dry powder pharmaceutical-based composition is one having a moisture content of less than about 10% by weight (%w) water, usually below about 5%w and preferably less than about 3%w; a particle size of about 1.0-5.0 µm mass median diameter (MMD), usually 1.0-4.0 µm MMD, and preferably 1.0-3.0 μm MMD; a delivered dose of about >30%, usually >40%, preferably >50%, and most preferred >60%; and an aerosol particle size distribution of about 1.0-5.0 µm mass median aerodynamic diameter (MMAD), usually 1.5-4.5 μm MMAD, and preferably 1.5-4.0 μm MMAD. Such compns. are of pharmaceutical grade purity. Examples are provided of zinc insulin, parathyroid hormone, interleukin-1 receptor, calcitonin, αl-antitrypsin, β-interferon, heparin, lipid genetic vector, and adenoviral vector formulations for pulmonary delivery. Formulations of growth hormones suitable for treatment of short stature or renal failure are claimed.
- AN 2004:11058 HCAPLUS <<LOGINID::20100623>>
- DN 140:65165
- ΤI Compositions and methods for the pulmonary delivery of aerosolized medicaments
- IN Platz, Robert M.; Patton, John S.; Foster, Linda; Eljamal, Mohammed
- PA Nektar Therapeutics, USA
- SO U.S., 12 pp., Cont.-in-part of U.S. 6,231,851. CODEN: USXXAM
- DT Patent
- LA English FAN CNT 21

PAN.	TMT	21																
	PA:	CENT	NO.			KIN)	DATE		AI	PL	ICAT	ION	NO.		D	ATE	
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PI	US	6673	335			B1		2004	0106	US	2	000-	6162	36		21	00007	14
	EP	9401	54			A2		1999	0908	E	1	999-	1103	69		19	99207	02
	EP	9401	54			В1		2007	0418									
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	EP	1693	080			A2		2006	0823	E	2	006-	9725			19	99207	02
	EP	1693	080			A3		2007										
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	ΑT	3598	42			T		2007	0515				1103			19	99207	02
	ES	2284	226			Т3		2007	1101	ES	1	999-	1103	69		19	99207	02

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US 5785049 A 19980728 US 1994-309691 19940921
NZ 329747 A 20000825 NZ 1995-329747 19950207
EP 1462096 A1 20040929 EP 2004-76082 19950207
EP 1462096 B1 20081210
                            R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                  EP 2036541 A1 20090318 EP 2008-21259
                                                                                                                                                                                                         19950207
                            R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                  TW 576750 B 20040221 TW 1995-84101726 19950224
                                                                            B1 20030624 US 1995-423515
A1 19951123 WO 1995-US6008
                  US 6582728
                                                                                                                                                                                                           19950414
                  WO 9531479
                                                                                                                                                                                                        19950515
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| No. 
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                  US 2000-616236 A1 20000714
US 2002-245706 A1 20020918
   ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN
- Preparation of stable particles in frozen aqueous matrix for TT pharmaceutical suspensions
- AB The present invention discloses a composition of a stable suspension of a poorly water soluble pharmaceutical agent or cosmetic in the form of particles of the pharmaceutical or cosmetic suspended in a frozen aqueous matrix and method for its preparation. The composition is stable for a prolonged

period of time, preferably 6 mo or longer and is suitable for parenteral, oral, or non-oral routes such as pulmonary (inhalation), ophthalmic, or topical administration. Thus, suspension was obtained from

Poloxamer-188 2.2, sodium deoxycholate 0.1, glycerin 2.2, and nabumetone 1%.

- AN 2003:319276 HCAPLUS <<LOGINID::20100623>>
- DN 138:343861
- ΤI Preparation of stable particles in frozen aqueous matrix for pharmaceutical suspensions
- IN Kipp, James E.; Doty, Mark J.; Rebbeck, Christine L.; Brynjelsen, Sean; Teresa, Konkel Jamie
- PA Baxter International Inc., USA
- SO U.S. Pat. Appl. Publ., 19 pp. CODEN: USXXCO
- DT Patent
- LA English

FAN.	.CNT 1 PATENT NO.						D	DATE			APE	LIC	CAT:	ION I	NO.		D	ATE	
PI	US		0077	329		A1		2003	0424										
	CA	2463	313			A1		2003	0501		CA	200	02-2	2463	313		2	0021	018
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	AU	2002	3378	94		B2		2007	0712										
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	ON	1750	011	99		2		2005	0333		OM	200	03-3	23/2	98		2	0021	010
	CIN	1100	OTT			A.		2000	1016		CIN	200	02-6	2207	22		2	0021	010
	D.C.	2005 1750 4502 2340	261			1 2		2010	0601		D.C.	200	02-	1131	07		2	0021	010
	TM	2004	DMOO	005		12		2010	1211		TN	200	02-	7 / 3 /: STOO	5/		2	0021	106
	MV	2004	0036	75		2		2003	0723		MY	200	04-1	2675	,		2	0040	410
	TTC	2006	0222	710		2.1		2006	1005		TIC	200	nc .	1061	2.2		2	nnen.	C10
	IIS	2006	0222	711		A1		2006	1005		HS	200	06-	1251	25		2	0060	619
PRAI	US	2001	-347	548P		P		2001	1019			_ 0 0					_		
	US	2002	-270	267		À		2002	1011										
	WO	2002	-US3	3270		W		2002	1018										
3007																	-		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OSC.G 5 RE.CNT 306 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS) THERE ARE 306 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Spray-drying a drug and a hydrophobic amino acid for pharmaceuticals
 AB According to the subject invention, dispersible dry powder

According to the subject invention, dispersible dry powder pharmaceutical-based compos. are provided, including methods for their manufacture and dry powder dispersion devices. A dispersible dry powder pharmaceutical-based composition has a moisture content of <10% water, usually below about 5% and preferably <3%; a particle size of 1.0-5.0 µm [mass median diameter; (MMD)], usually 1.0-4.0 µm MMD, and preferably 1.0-3.0 µm MMD; a delivered dose of >60%; and an aerosol particle size distribution of 1.0-45.0 µm mass median aerodynamic diameter Such compons, are of pharmaceutical grade purity. A 26.7% human calcitonin formulation was achieved by combining 1.9 mg human calcitonin/ 1.0 mL water with 4.3 mg/mL mannitol and 0.9 mg/mL citrate buffer at pH 3.85. A dry powder of the 26.7% human calcitonin formulation was produced by spray drying. The final 26.7% human calcitonin dry powder composition contained 60% mannitol and 13.3% citrate. The formulation contained 0.71% moisture. The particle size distribution of

the composition was determined to be 1.33 MMD. AN 2002:290686 HCAPLUS <<LOGINID::20100623>>

- DN 136:299752
- TI Spray-drying a drug and a hydrophobic amino acid for pharmaceuticals
- IN Platz, Robert M.; Patton, John S.; Foster, Linda; Eljamal, Mohammed
- PA Inhale Therapeutic Systems, USA
- SO U.S., 11 pp., Cont. of U.S. Ser. No. 737,724.
- CODEN: USXXAM
- DT Patent
- LA English FAN.CNT 21

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PI	US	6372258			В1		2002	0416		US 1	999-	4477	53		1	9991	122	
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	US	359842 2284226 5607915 5785049 329747 1462096			A		1997	0304		US 1	994-	2328	49		1	9940	425	
	US	5785049			A		1998	0728		US 1	994-	3096	91		1	9940	921	
	NZ	329747			A		2000	0825		NZ 1	995-	3297	47		1	9950	207	
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	US	6231851			B1		2001	0515		US 1	997-	7377	24		1	9970	714	
	US	6080721			A		2000	0627		US 1	998-	1284	01		1	9980	803	

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US 7456150 B1 20081125 US 2000-577264 20000522
US 20020132787 A1 2002019 US 2001-978826 20011016
US 20020192164 A1 2002019 US 2002-66106 20020201
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EP 1995-90506 A3 19950207
US 1995-47757 A1 19950207
US 1995-251660 A1 19950207
US 2000-651600 A1 19950207
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US 2000-651600 A1
                  ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS) RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Dry powder compositions having improved dispersivity

AB The present invention provides a highly dispersible formulation comprising an active agent and a dipeptide or tripeptide comprising at least two leucyl residues. The composition of the invention possesses superior aerosol properties and is thus preferred for aerosolized administration to the lung. Also provided are a method for (i) increasing the dispersibility of an active-agent containing formulation for administration to the lung, and (ii) delivery of the composition to the lungs of a subject. The surface tension of several representative di- and tripeptides and proteins was determined and highly surface active peptides include dileucine and trileucine.

AN 2001/338322 HCAPIUS <COGNID::20100623>>

DN 134:357557

TI Dry powder compositions having improved dispersivity

IN Lechuga-Ballesteros, David; Kuo, Mei-Chang

PA Inhale Therapeutic Systems, Inc., USA

SO PCT Int. Appl., 56 pp.

CODEN: PIXXD2 DT Patent

LA English

FAN.	CNT	1																	
	PAT	TENT	NO.			KIN	D	DATE				LICAT				D2	ATE		
DT	MO					7.1	_	2001	0510			2000-				21	0000	112	
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	HU	2003	0018	51		A2		2003	0929		HU :	2003-	1851			20	0000	412	
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	E.C	2254	164	rı,	CI	т3		2006	0616		re ·	2000-	9221	17		21	0000	112	
	TT.	1490	85			A		2007	0515		TI.	2000-	1490	85		21	0000	412	
	TW	3106	88			В		2009	0611		TW :	2000-	8910	6941		20	0000	412	
	AT	4616	92			T		2010	0415		AT 2	2005-	2761	0		20	0000	412	
	US	6518	239			B1		2003	0211		US :	2000-	5487	59		20	0000	413	
	ZA	2002	0028	55		A		2003	0821		ZA :	2002-	2855			20	020	411	
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	MX	2002	0041	93		A		2002	1213		MX :	2002-	4193			20	020	426	
	IN	2289	09			A1		2009	0320		IN 3	2002-	CN61	4		20	020	426	
	US	2003	0186	894		A1		2003	1002		US :	2002-	3133	43		20	0021	206	
	US	6835	372			B2		2004	1228										
	US	2005	0147	567		A1		2005	0707		US 2	2004-	9855	09		20	0041	110	
	US	7482	024			B2		2009	0127			, IT, 2000- 2000- 2000- 2005- 2000- 2002- 2002- 2002- 2002- 2002- 2004-							

	US	20090117193	A1	20090507	US	2008	3-343365	20081223
PRAI	US	1999-162451P	P	19991029				
	US	1999-164236P	P	19991108				
	US	1999-172769P	P	19991220				
	US	2000-178383P	P	20000127				
	US	2000-178415P	P	20000127				
	EP	2000-922117	A3	20000412				
	WO	2000-US9785	W	20000412				
	US	2000-548759	A1	20000413				
	US	2002-313343	A1	20021206				
	US	2004-985509	A3	20041110				

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OSC.G 39 THERE ARE 39 CAPLUS RECORDS THAT CITE THIS RECORD (49 CITINGS)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Drug delivery systems comprising pharmacological agents encapsulated with proteinoids
- AB Å pharmacol. active agent is encapsulated within proteinoid microspheres having diameter of ≤10 μm and formed from linear thermal condensation polymers of mixed amino acids. The microspheres protect the active agent from deleterious conditions within the gastrointestinal tract and release the active agent in the bloodstream or other targets. A mixture of aspartic acid, arginine-HCl, isoleucine, and glycerol was heated to yield a solid proteinoid material, which was ground to a fine powder. The powdered proteinoid was mixed with an aqueous solution of porcine insulin crystals to give insulin-bearing microspheres. The microsphere suspension was orally administered to rats and the decrease in
- blood glucose was observed
 AN 1993:11756 HCAPLUS <<LOGINID::20100623>>
- DN 118:11756
- OREF 118:2201a,2204a
- TI Drug delivery systems comprising pharmacological agents encapsulated with proteinoids
- PA Clinical Technologies Associates, Inc., USA
- SO Israeli, 33 pp.
- CODEN: ISXXAQ DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI PRAI	IL 84935 IL 1987-84935	A	19920115 19871223	IL 1987-84935	19871223

=> s 12

L6 45532 L2

=> s 14 and 16

L7 1025 L4 AND L6

=> s inhal?

L8 66856 INHAL?

=> s 17 adn 18

MISSING OPERATOR L7 ADN

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

```
=> s 17 and 18
1.9
          137 L7 AND L8
=> s fine or particle
        377805 FINE
        932885 PARTICLE
L10
       1253967 FINE OR PARTICLE
=> s 19 and 110
           113 L9 AND L10
=> s 111 and (PY<2004 or AY<2004 or PRY<2004)
      24051141 PY<2004
       4831495 AY<2004
       4305517 PRY<2004
1.12
            50 L11 AND (PY<2004 OR AY<2004 OR PRY<2004)
=> s 112 not 15
L13
           44 L12 NOT L5
=> d 113 1-44 ti abs bib
L13 ANSWER 1 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
TΙ
     Use of simple hydrophobic amino acids to form porous microparticles
     including phospholipid, for pulmonary drug delivery
     Particles having a tap d. of less than 0.4 g/cm3 include a hydrophobic
     amino acid or salt thereof and a therapeutic, prophylactic or diagnostic
     agent or any combination thereof. Preferred particles include a
     phospholipid, have a median geometric diameter between about 5 and about 30
     \mu and an aerodynamic diameter between about 1 and about 5 \mu. The
     particles can be formed by spray-drying and are useful for delivery to the
     pulmonary system. Thus, particles including 4% albuterol sulfate,
     60% DPPC and 36% leucine, alanine or glycine were formed by spray-drying.
     They exhibited mass median aerodynamic diams. of 2.38, 3.17, and 5.35
     μm, volumetric median geometric diams. of 10.28, 11.48, and 13.09
     μm, and densities of 0.054, 0.076, and 0.167 g/cm3, resp. The data
     showed that all three amino acids were useful in forming particles
     suitable for pulmonary delivery; leucine and alanine
     formulations appeared best suited for delivery to the deep lung, while
     glycine formulations appeared more suitable for delivery to the central
     and upper airways.
AN
   2007:863560 HCAPLUS <<LOGINID::20100623>>
DN
    147:197422
TΙ
     Use of simple hydrophobic amino acids to form porous microparticles
     including phospholipid, for pulmonary drug delivery
    Batycky, Richard P.; Lipp, Michael M.; Niven, Ralph W.
TN
PA
     Advanced Inhalation Research, Inc., USA
     U.S., 11pp., Cont.-in-part of U.S. Ser. No. 382,959.
SO
     CODEN: USXXAM
DT
     Patent
LA
    English
FAN.CNT 2
                               DATE APPLICATION NO. DATE
     PATENT NO.
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20030701 US 1999-382959
     US 7252840
                       В1
                                                                  20000823 <--
                        B1
                                                                  19990825 <--
     US 6586008
                    T 20060315
A2 20060322
A3 20080305
     AT 319429
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                                          AT 2000-957716
                                                                  20000823 <--
     EP 1637128
                                           EP 2005-77639
                                                                  20000823 <--
     EP 1637128
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, FI, CY

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PT 1210068 E 20060731 PT 2000-957716 20000823 <--
ES 2258981 T3 20060916 ES 2000-957716 20000823 <--
US 20070104658 A1 20070510 US 2006-637353 20061212 <--
US 20080160092 A1 20080703 US 2007-873467 20071017 <--
US 20080160098 A1 20080703 US 2007-873467 20071017 <--
PRAI US 1999-382959 A2 20080823 <--
EP 2000-957716 A3 20000823 <--
US 2000-644320 A1 20000823 <--
US 2000-643753 A3 20061212
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 2 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Trospium-containing compositions
- AB The invention relates to a method for treating a disease characterized by a constrictive airway comprising administering to a patient in need
 - thereof via inhalation a pharmaceutical composition comprising trospium, wherein said patient achieves an effective therapy for at least
 - 10 h. The trospium composition is preferably a particulate formulation useful for administration via a dry powder inhaler. In a
 - preferred embodiment, the composition further comprises a second active agent, such as a beta-2 agonist. A particularly preferred second active agent is formoterol, wherein the trospium, formoterol composition is manufactured by

spray

- drying a mixture comprising trospium and formoterol.
- AN 2007:202111 HCAPLUS <<LOGINID::20100623>>
- DN 146:259006
- TI Trospium-containing compositions
- IN Ehrich, Elliot; Deaver, Daniel; Clarke, Robert; Lipp, Michael M.
- PA Advanced Inhalation Research, Inc., USA
- SO U.S. Pat. Appl. Publ., 9 pp., Cont.-in-part of U.S. Ser. No. 392,333. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 2

	CITE E			
	PATENT NO.		APPLICATION NO.	
PI	US 20070041912	A1 20070222	US 2005-550471	20050922 <
	US 20040042970	A1 20040304	US 2003-392333	20030319 <
	CA 2517265	A1 20041104	CA 2003-2517265	20030904 <
			WO 2003-US27618	
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			DZ, EC, EE, ES, FI, GB,	
			JP, KE, KG, KP, KR, KZ,	
			MK, MN, MW, MX, MZ, NO,	
			SG, SK, SL, TJ, TM, TN,	TR, TT, TZ,
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	AU 2003273273	A1 20041119	AU 2003-273273	20030904 <
	AU 2003273273	B2 20070208		
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20050908 <--
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                       A2 20030319 <--
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    US 2002-366440P
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    US 2002-366470P
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    US 2002-366479P
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    US 2002-366487P P 20020320 <--
AU 2003-230689 A3 20030319 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

- L13 ANSWER 3 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- ${\tt TI}$ $\;\;$ Pharmaceutical compositions comprising apomorphine for pulmonary inhalation
- AB The present invention relates to inhalable formulations of apomorphine or its pharmaceutically acceptable salts or esters for use in treating sexual dysfunction. The present invention also relates to methods for preparing the apomorphine formulations as well as to methods for treatment of sexual dysfunction using said formulations and inhalers including said formulations. The present invention further relates to the use of apomorphine in the manufacture of a medicament for treating sexual dysfunction. Thus, 10 g of micronized apomorphine hydrochloride was added to 70 g of micronized lactose (Respitose SV 003), an addnl. 70 g of the lactose were added, and the resultant blend was passed through a 150 µm screen. The particle size distribution for a 200 µm dose of the apomorphine-lactose powder was fine particle dose (<5 µm) 117 µm, ultrafine particle dose (<5 ½m) 80 µm, and MMAD
 - (mass median aerodynamic diameter) 1.94 µm.
- AN 2006:796630 HCAPLUS <<LOGINID::20100623>>
- DN 145:217984
- TI Pharmaceutical compositions comprising apomorphine for pulmonary inhalation
- IN Staniforth, John Nicholas; Morton, David; Tobyn, Michael; Eason, Stephen; Harmer, Quentin; Ganderton, David
 PA UK
- SO U.S. Pat. Appl. Publ., 51pp., Cont.-in-part of U.S. Ser. No. 621,964.
- CODEN: USXXCO DT Patent
- LA English
- FAN.CNT 8

	PATENT			KIN	D	DATE			APPL					D	ATE		
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PI	US 2006	017839	94	A1		2006	0810		US 2	006-	5522	31		2	0060	421 <	
	US 2004	020443	39	A1		2004	1014		US 2	003-	4130	22		2	0030	414 <	
	US 2004	02044	40	A1		2004	1014		US 2	003-	6219	64		2	0030	717 <	
	WO 2004	08937	4	A1		2004	1021		WO 2	004-	GB16:	27		2	0040	414 <	
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TD, TG
PRAI US 2003-413022 A2 20030414 <-US 2003-621964 A2 20030717 <-WO 2004-GB1627 W 20040414

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

- L13 ANSWER 4 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Pharmaceutical compositions for treating premature ejaculation by pulmonary inhalation
- AB The present invention relates to improved formulations for the treatment of prenature ejaculation and, in particular, relates to the administration of antidepressants by pulmonary inhalation for treating premature ejaculation. Various types of known antidepressants may be used, including tricyclic antidepressants, such as clomipramine. For example, clomipramine-HCl was micronized with an injector air pressure of 7 bar, grinding air pressure of 5 bar, and powder feed rate of approx. 10 g/min. The pre-micronized clomipramine was then blended in a pestle with a spatula with 5% Mg stearate and the blend was micronized with an injector air pressure of 7 bar, grinding air pressure of 1 bar and powder feed rate of approx. 10 g/min. Malvern (dry powder) particle size measurement gave a d(50) of 1.39 µm. Approx.

 2 mg of the formulation was then loaded and sealed into a foil blister to
 - be used in a powder inhaler device. 2005:259861 HCAPLUS <<LOGINID::20100623>>
- AN 2005:25986 DN 142:322765
- TI Pharmaceutical compositions for treating premature ejaculation by pulmonary inhalation
- IN Morton, David; Staniforth, John; Tobyn, Mike; Eason, Stephen; Harmer, Quentin; Ganderton, David
- PA Vectura Limited, UK
- SO PCT Int. Appl., 62 pp.
- CODEN: PIXXD2
- DT Patent LA English
- FAN.CNT 8

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 5 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Manufacture of benzodiazepine compositions for pulmonary inhalation
- AB The present invention relates to a pharmaceutical composition comprising a fine particle fraction (c5 µm) of at least 50%, and preferably between 70 and 99% or between 80 and 99%, and to methods of making particles. In particular, the invention relates to methods of making composite active particles comprising a pharmaceutically active material, i.e., a benzodiazepine, such as clobazam or clonazepam, for pulmonary inhalation, the method comprising a jet milling process. For example, a powder was prepared containing 80% clobazam, 18% micronized lactose (Respitose SV003, mean particle size 50 to 55 µm), and 2% leucine. The formulation was then incorporated into blisters, each blister containing 4 mg of the powder
- AN 2005:259853 HCAPLUS <<LOGINID::20100623>>
- DN 142:322761
- TI Manufacture of benzodiazepine compositions for pulmonary inhalation
- IN Morton, David; Ganderton, David; Staniforth, John; Tobyn, Mike; Eason, Stephen; Harmer, Quentin
- PA Vectura Limited, UK
- SO PCT Int. Appl., 76 pp.
- CODEN: PIXXD2 DT Patent
- LA English
- FAN CNT 8

FAN.CNT 8 PATENT NO. KIND DATE APPLICATION NO. DATE																		
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	EP 1670438																915 <	
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CN 1882314 A 20061220 CN 2004-80033645 20040915 <--
JP 2007505832 T 20070315 JP 2006-525904 20040915 <--
ZA 2006002747 A 20070425 ZA 2006-2747 20060407
IN 2006CN01285 A 20070629 IN 2006-CN1285 20060413 <--
US 20070081948 A1 20070412 US 2006-CN1285 20060413 <--
GR 2003-21607 A 20030915 <--
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GR 2003-21612 A 20030915 <--
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GR 2004-9133 A 20040423
WO 2004-GR3942 W 20040915
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS) RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 6 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TT Pharmaceutical compositions & devices for dispensing the same AB The present invention relates to dry powder pharmaceutical compns. comprising a benzodiazepine for administration by inhalation, and in particular, benzodiazepine dry powder compns. and inhaler devices for dispensing the same. Co-jet milled formulations comprising clobozam, lecithin, and magnesium stearate exhibited exceptional fine particle fraction (FPFs) when dispensed from an active dry powder inhaler device. The FPFs observed were significantly better that those of the mechanofused formulations and those formulations which did not include an additive material. This improvement would appear to be largely due to reduced throat deposition, which was less than 8% for the co-jet milled formulations, compared to 15% for the pure drug and up to 27% for the
- mechanofused formulations. 2005:259848 HCAPLUS <<LOGINID::20100623>> AN
- DN 142:322760
- TI Pharmaceutical compositions & devices for dispensing the same
- IN Morton, David; Ganderton, David; Staniforth, John; Tobyn, Mike; Eason, Stephen; Harmer, Quentin
- PA Vectura Ltd., UK
- SO PCT Int. Appl., 65 pp.
- CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 8

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PI	WO WO	2005 2005 2005	0255 0255	36 36		A3		2005 2005 2005				004-						915 <-	-
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US 20060257491 A1 20061116 US 2006-571146 20060717 <--
PRAI GB 2003-21607 A 20030915 <--
     GB 2003-21608
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     GB 2004-9133
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     WO 2004-GB3996
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
             THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 7
             THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13 ANSWER 7 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
TΙ
     Devices and pharmaceutical compositions containing amino acids,
     phospholipids or stearates for enhancing dosing efficiency
AB
     The present invention relates to enhancing the dosing efficiency of
    pharmaceutical dry powder formulations administered by
     pulmonary inhalation. In particular, the present
     invention relates to the provision of dry powder
     inhalers and dry powder compns. which reproducibly
     achieve a much higher delivered dose of the pharmaceutically active agent
     than currently achieved, that is wherein upon actuation of the device, a
     dosing efficiency at 5 µm of at least 70% is achieved. For example, a
     blend containing Pharmatose 150M 85.15%, Sorbolac 400 8.25%, micronized
     leucine 5.00%, and apomorphine hydrochloride 1.60% was prepared, and the
     blend was passed through a 212 µm sieve. Thereafter, the blend (25 mg;
     400 µg apomorphine hydrochloride) was placed in capsules and tested in
     a Cyclohaler inhaler using an Anderson Cascade Impactor (ACI)
     testing device. A delivered dose was 81% of the total dose, fine
     particle fraction (percent of the delivered dose <5 µm) was
     67%, fine particle dose (percent of the total dose <5
     μm) was 55%, a mass median aerodynamic diameter (MMAD) was 2.3 μm,
     fine particle dose was 220 µm, ultrafine
     particle dose (percent of the total dose <3 µm) was 44%,
     ultrafine particle dose was 175 µm, and ultrafine
    particle fraction was 53%.
AN
    2004:927035 HCAPLUS <<LOGINID::20100623>>
DN
    141:384314
    Devices and pharmaceutical compositions containing amino acids,
    phospholipids or stearates for enhancing dosing efficiency
    Staniforth, John; Morton, David; Tobyn, Michael; Eason, Stephen; Harmer,
    Ouentin; Ganderton, David
PA
    Vectura Ltd., UK
SO PCT Int. Appl., 222 pp.
    CODEN: PIXXD2
DT
    Patent
   English
T.A
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FAN.	CNT 8																	
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A1 20041014 US 2003-621964
A1 20041104 AU 2004-231342
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      US 20040204439
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     US 20040204440
     AU 2004231342
                                                                         20040414 <--
                           A1 20041104 CA 2004-2522158
A2 20060125 EP 2004-727320
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      JP 2006522634
                                 20061005 JP 2006-506130
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     US 2006014/365
IN 2005CN02992
                           A1 20060706 US 2005-552326
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                          A 20070921 IN 2005-CN2992
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A 2006002747 A
IN 2008CN05576 A
PRAI US 2003-413022 A
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                                                                         20060404 <--
                                 20090320
                                               IN 2008-CN5576
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20030717 <--
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     WO 2004-GB1628
IN 2005-CN2992
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                            A3
                                  20051114
OSC.G
               THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
RE.CNT 8
               THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
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- L13 ANSWER 8 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- ALL CITATIONS AVAILABLE IN THE RE FORMAT TΙ Preparation and pharmaceutical properties of salcatonin dry powder inhalations
- The salcatonin dry powder inhalations (SCT-DPIs) A AB (mixture of mannitol and L-leucine) and B (mixture of mannitol and lactose) were prepared by spray-drying and their main pharmaceutical properties were studied. Dumping rate of SCT-DPI capsules and deposited fraction of SCT at effective part were determined according to Chinese Pharmacopeia 2000. Particle morphol. under different relative humidity (RH) was observed by scanning electron microphotograph, particle size and its distribution were determined by Malvem Mastersizer and the transition of amorphous state for carriers before and after spray- drying was studied by DTA and X-ray powder diffraction (XRPD). Dumping rates of SCT-DPIs A and B capsules were both above 10% and deposited fraction of SCT at effective part was above 90% for both A and B formulations, which were all in agreement with the standard of Chinese Pharmacopeia 2000. Powder particle of SCT-DPI A was round and existed one by one after keeping one month under 0, 23% and 52% RH, but aggregation could be observed under 75% RH; many particles which were also round agglomerated in SCT-DPI B even under zero RH; mean particle size of SCT-DPI A was 1.67 µm, which was much smaller than that of SCT-DPI B; in SCT-DPI A particle with empty core which was lighter than the same size particle with concreted core was observed. It was shown by DTA that melted heat of L-leucine in SCT-DPI composed of mannitol and L-leucine was lower than that of L-leucine alone after spray-drying. It was confirmed by XRPD that diffraction intensity of carriers in SCT-DPIs decreased more than that of carriers before spray-drying. Round particle could be made when mannitol was added to carriers and ultra low d. carriers could be formed when L-leucine was added. It was suggested by SEM that DPIs should be kept under certain RH. Particle size and distribution of SCT-DPIs were in accordance with DPIs requirements. Complex spray-drying carriers formed amorphous state easier than single carrier.
- AN 2004:727750 HCAPLUS <<LOGINID::20100623>>
- DN 142:341575
- TT Preparation and pharmaceutical properties of salcatonin dry powder inhalations
- AII Xiong, Lianjie; Zhu, Jiabi
- CS Zhongkun Pharmaceutical Research Institute, China Pharmaceutical

University, Nanjing, 210009, Peop. Rep. China

SO Yaoxue Xuebao (2003), 38(3), 218-222

CODEN: YHHPAL; ISSN: 0513-4870

PB Yaoxue Xuebao Bianjibu

DT Journal

LA Chinese

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

- L13 ANSWER 9 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Freeze-dried interferon-γ composition for transpulmonary administration and inhalation system therefor

AB The present invention provides a freeze-dried interferon-y composition for transpulmonary administration which cam maintain IFN-y stably, and can be prepared into fine particles in a vessel at the time of use. A freeze-dried interferon-y composition for transpulmonary administration of the present invention has the following properties: (1) containing at least one hydrophobic stabilizer selected from the group consisting of hydrophobic amino acids, dispeptides of hydrophobic amino acids, tripeptides of hydrophobic amino acids and derive, of hydrophobic amino acids and salts thereof; at least one hydrophilic stabilizer selected from the group consisting of hydrophobic amino acids and salts thereof; at least one hydrophilic stabilizer.

acids, tripeptides of hydrophobic amino acids and derivs. of hydrophobic amino acids and salts thereof; at least one hydrophilic stabilizer selected from the group consisting of hydrophilic amino acids, dipeptides of hydrophilic amino acids, tripeptides of hydrophilic amino acids, tripeptides of hydrophilic amino acids, derive. of hydrophilic amino acids and salts thereof; and interferon- γ (2) a non-powder cake-like form; (3) a disintegration index of 0.015 or more; and (4) becoming fine particles having a mean particle diameter of 10 μm or less or a fine particle fraction of 10 % or more upon receipt of

fine particle fraction of 10 % or more upon receipt of an air impact having an air speed of at least 1 m/s and an air flow rate of at least 17 mL/s.

AN 2004:531379 HCAPLUS <<LOGINID::20100623>>

DN 141:76771

- TI Freeze-dried interferon-γ composition for transpulmonary
- administration and inhalation system therefor
- IN Yamashita, Chikamasa; Ibaragi, Shigeru
- PA Otsuka Pharmaceutical Co., Ltd., Japan SO PCT Int. Appl., 120 pp.
- CODEN: PIXXD2
- DT Patent
- LA English

FAN.C	ONT.	1																	
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			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
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	EP	1569	681			A1		2005	0907		EP 2	003-	7788	84		2	0031	212 <	<
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	US 20060057106			A1		2006	0316		US 2	005-	5387	81		2	0050	510 <	<		
	IN 2005DN02516			A		2009	1030		IN 2	005-	DN25	16		2	00504	511 <	<		

PRAI JP 2002-363026 WO 2003-JP15957 A 20021213 <--W 20031212 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 10 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- Novel dry powder inhalation system for transpulmonary administration
- AB It is intended to provide a novel dry powder inhalation system for transpulmonary administration which is suitable for transpulmonary administration. This novel dry powder
 - inhalation system for transpulmonary administration comprises : (1) a container having a freeze-dried composition for transpulmonary administration which is prepared by freeze-drying a liquid composition

containing a

component in an undissolved state and has the following properties (i) to (iii): (i) being in the form of a non-powdery cake; (ii) having a disintegration index of 0.05 or more; and (iii) upon an air impact of an air speed of at least 1 m/s and an air flow rate of at least 17 mL/s, being disintegrated into fine particles having an average particle diameter (an aerodynamic particle diameter) of 10 μm or less or an effective particle rate of 10% or more; combined with (2) a means of applying the above-described air impact to the freeze-dried composition in the above-described container, and a means of discharging the powdery freeze-dried composition having been disintegrated into fine particles. A freeze-dried inhalant composition was

prepared from a cationic liposome (Lipofect AMINE 2000), a plasmid DNA (pEGFP-C2), and L-leucine.

- AN 2004:531335 HCAPLUS <<LOGINID::20100623>>
- DN 141:59762
- ΤI Novel dry powder inhalation system for transpulmonary administration
- IN Yamashita, Chikamasa; Akagi, Akitsuna; Fukunaga, Yuichiro
- PA Otsuka Pharmaceutical Co., Ltd., Japan
- SO PCT Int. Appl., 106 pp.
- CODEN: PIXXD2
- DT Patent T.A
- Japanese
- FAN.CNT 2

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			LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	
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			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
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	EP 1579855			A1		2005	0928		EP 2	003-	7788	63		21	0031	212	<		
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OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Inhalable drug delivery particles comprising epinephrine and method of uses

AB The present invention is directed toward particles for delivery of epinephrine to the respiratory system and methods for treating a patient in need of epinephrine. The particles and respirable compns. comprising the particles of the present invention described herein comprise the bioactive agent epinephrine, or a salt thereof, as a therapeutic agent. The particles are preferably formed by spray drying. Preferably, the particles and the respirable compns. are substantially dry and are substantially free of propellants. In a preferred embodiment, the particles have aerodynamic characteristics that permit targeted delivery of epinephrine to the site(s) of action.

2004:331569 HCAPLUS <<LOGINID::20100623>> AN

DN 140:344875

ΤI Inhalable drug delivery particles comprising epinephrine and method of uses

IN Batycky, Richard P.; Caponetti, Giovanni; Childs, Mariko; Ehrich, Elliot; Fu, Karen; Hrkach, Jeffrey S.; Li, Wen-I.; Lipp, Michael M.; Pan, Mei-Ling; Summa, Jason

PA USA

SO U.S. Pat. Appl. Publ., 60 pp.

CODEN: USXXCO

DT Patent

LA English

F.A.	N.CNT 1				
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PΙ	US 20040076588	A1	20040422	US 2003-607571	20030626 <
	CA 2488976	A1	20040108	CA 2003-2488976	20030626 <
	CA 2488976	С	20090825		
	WO 2004002551	A2	20040108	WO 2003-US20166	20030626 <
	WO 2004002551	A3	20040812		

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     US 2002-425349P
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G
              THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
L13 ANSWER 12 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
    Nebulizer formulations of dehydroepiandrosterone and methods of treating
     asthma or chronic obstructive pulmonary disease using
     compositions thereof
     This invention relates to a sealed container containing a powder
     formulation comprising a dehydroepiandrosterone (DHEA), its analog(s) or
     salt(s) by itself or with a pharmaceutically or veterinary acceptable
     carrier or diluent, and having a particle size of about 0.1
     \mu m to about 100 \mu m. The formulation can be used to treat or prevent
     asthma, chronic obstructive pulmonary disease, lung
     inflammation, and other respiratory diseases or conditions. The
     formulation may be prepared by jet milling, and may be delivered through the
     respiratory tract or other routes using a nebulizer. The sealed container
     is provided in a device and/or a therapeutic kit. Spry drying of anhydrous
     DHEA sulfate and determination of respiratory dose is described.
    2004:120665 HCAPLUS <<LOGINID::20100623>>
DN
    140:169659
    Nebulizer formulations of dehydroepiandrosterone and methods of treating
     asthma or chronic obstructive pulmonary disease using
    compositions thereof
IN
    Leonard, Sherrya.; Johnson, Keith A.
    Epigenesis Pharmaceuticals, Inc., USA
     PCT Int. Appl., 69 pp.
    CODEN: PIXXD2
    Patent
T.A
    English
FAN.CNT 2
                        KIND DATE APPLICATION NO. DATE
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    WO 2004012653 A2 20040212
WO 2004012653 A3 20040708
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,

AB

AN

ΤI

PA

SO

DT

ΡI

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A2 20050316 EP 2003-766816
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CN 1003-00007 C 2009-916
CN 1681520 A 20051012 CN 2003-813681
JP 2005537296 T 20051208 JP 2004-525996
IN 2004DN03700 A 20070420 IN 2004-DN3700
IN 236147 A1 20091009
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
                 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
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RE.CNT 5 ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 13 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- Dihydrate dehydroepiandrosterone and methods of treating asthma or chronic obstructive pulmonary disease using compositions thereof
- AB This invention relates to a powder formulation comprising a dihydrate dehydroepiandrosterone covalently bound to a sulfate, its analog(s) or salt(s) by itself and with a pharmaceutically or veterinarily acceptable carrier, and having a particle size of about 0.1 μm to about 100 μm . The formulation can be used to treat or prevent asthma, chronic obstructive pulmonary disease, lung
 - inflammation, SARS, and other respiratory diseases or conditions. The formulation may be prepared by jet milling, and may be delivered through the respiratory tract or other routes. The formulation is provided in a device and a therapeutic kit.
- AN 2003:1006714 HCAPLUS <<LOGINID::20100623>>
- DN 140:47522
- ΤI Dihydrate dehydroepiandrosterone and methods of treating asthma or chronic obstructive pulmonary disease using compositions
- IN Leonard, Sherry A.; Johnson, Keith A.
- PA Epigenesis Pharmaceuticals, Inc., USA
- SO PCT Int. Appl., 67 pp.
- CODEN: PIXXD2
- DT Patent.
- LA English

FAN.	CNT 2																
	PATENT	NO.			KIN	D	DATE			APPL	ICAT	I NOI	NO.		D,	ATE	
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PI	WO 2003	1057	75		A2		2003	1224		WO 2	003-	US18	945		2	0030	617 <
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 140:47522

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 14 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN

TI a process of forming and modifying pharmaceutical particles

AB The present invention relates to processes for forming particles containing drugs in a solution, changing the bulk or surface properties of a drug particle, and/or microencapsulating drug particles, and compns. produced thereby. In some embodiments, the process described utilizes mech. agitation, more specifically low-frequency sonication, under controlled conditions, which provides mild shear forces during forming and/or precipitation to control the particle growth and mixing properties. Particle size can range from <200 nm to >1 mm, depending on the processing conditions and application. The process can be used to form a drug particle suspension, dry a wet powder slurry or suspension, as well as to improve the surface properties of the particle through conditioning the structure of the particle or particle surface and/or annealing the particle or particle surface. Annealing or conditioning drug particles may be used to force an amorphous to crystalline transition, creating a more stable powder, or smooth a particle surface. In addition, the process can be used to microencapsulate particles by suspending the microparticles in a non-solvent including a coating material (such as a biodegradable polymer) under controlled process conditions. The powder compns. produced thereby possess improved properties including, but not limited to, improved flow and dispersibility, controlled bioadhesion, stability, resistance to moisture, dissoln./release profiles, and/or bioavailabilities. This process, and the compns. produced, provide significant advantages in the manufacture of pharmaceutical particulate formulations, as well as biomedical, diagnostic, and chromatog. particulate compns., where sensitive macromols., such as proteins or DNA, are involved that would be degraded using more rigorous processing conditions or temps. Thus, a solution of 10 g

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lactose and 0.2 g leucine in water was agitated at 300-400 Torr for 24 h.
     A white powder was obtained containing particles of the size <10
    2003:875089 HCAPLUS <<LOGINID::20100623>>
AN
DN 139:354491
TI
    a process of forming and modifying pharmaceutical particles
IN
    Talton, James D.; McConville, Christopher
PA
SO
    PCT Int. Appl., 34 pp.
     CODEN: PIXXD2
    Patent
LA
    English
FAN.CNT 1
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    WO 2003090717 A1 20031106 WO 2003-US11488
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AU 2003263024 AI 20031110 AU 2003-263024 20030423 <--
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OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
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RE.CNT 3
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13 ANSWER 15 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
TI
    Inhalable sustained-release pharmaceutical formulations
AB
    The present invention is based, in part, on the unexpected discovery that
    particles for pulmonary delivery of a therapeutic, prophylactic
    or diagnostic agent comprising a phospholipid and leucine can produce
    sustained effect of the agent. Specifically, particles for
    pulmonary delivery of a therapeutic, prophylactic or diagnostic
    agent that contain a phospholipid or a combination of phospholipids.
    wherein the phospholipid or combination of phospholipids is present in the
     particles in an amount of about 1-46%; and leucine, wherein leucine is
    present in the particles in an amount of at least 46%, can contribute to
    sustained effect of the agent. Particles that comprise at least 46%
     leucine but that do not contain phospholipids do not exhibit these same
     sustained-release properties. Thus, a composition contained leucine 46, DPPC
    46, and albuterol sulfate 8%.
AN
    2003:777510 HCAPLUS <<LOGINID::20100623>>
DN
    139:296969
     Inhalable sustained-release pharmaceutical formulations
IN
    Basu, Sujit K.; Caponetti, Giovanni; Clark, Robert; Elbert, Katharina J.
PA
    Advanced Inhalation Research, Inc., USA
SO
    PCT Int. Appl., 94 pp.
    CODEN: PIXXD2
    Patent
LA English
FAN.CNT 2
    PATENT NO. KIND DATE APPLICATION NO. DATE
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                         A3 20040212
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US 2002-366440P P
US 2002-366470P P
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US 2002-36647P P
AU 2003-2366487P A
WO 2003-230689 A3
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RE.CNT 3
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L13 ANSWER 16 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
TI
     Inhalable formulations for sustained release
    The present invention is based, in part, on the unexpected discovery that
AB
     aerosol particle formulations for pulmonary delivery
     of a therapeutic, prophylactic or diagnostic agent comprising an asym.
     phospholipid exhibit sustained release and/or sustained action of the
     agent. In some embodiments, as an alternative to one or more asym.
     phospholipids or in addition to one or more asym. phospholipids, the instant
    particles comprise one or more glycerol fatty acid esters. The present
     invention is directed to spray dried non-polymeric particles for
     pulmonary delivery and sustained release of a therapeutic,
    prophylactic or diagnostic agent. In one embodiment, the particles
    comprise a combination of phospholipids wherein at least one of the
    phospholipids is an asym. phospholipid. In another embodiment, the
    particles comprise one or more phospholipids and one or more glycerol
     fatty acid esters. For example, a dry powder particle
     formulation contained 76% stearoylpalmitoyl phosphatidylcholine, 16%
     leucine, and 8% albuterol sulfate.
AN
     2003:696715 HCAPLUS <<LOGINID::20100623>>
DN
     139:219343
TI
    Inhalable formulations for sustained release
IN
    Basu, Sujit K.; Elbert, Katharina; Hrkach, Jeffrey; Caponetti, Giovanni
PA
    Advanced Inhalation Research, Inc., USA
    PCT Int. Appl., 76 pp.
    CODEN: PIXXD2
DT
    Patent
LA.
   English
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     PATENT NO. KIND DATE APPLICATION NO. DATE
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
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PRAI US 2002-359466P P 20020222 <--
US 2002-427845P P 20021120 <--
W0 2003-US5105 W 20030220 <--
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 3
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13 ANSWER 17 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
ΤI
     Particles for inhalation having rapid release properties
AB
     The invention generally relates to formulations having particles
     comprising phospholipids, bioactive agent and excipients and the
     pulmonary delivery thereof. Dry powder inhaled
     insulin formulations are disclosed. Improved formulations comprising
     DPPC, insulin and sodium citrate which are useful in the treatment of
     diabetes are disclosed. Also, the invention relates to a method of for
     the pulmonary delivery of a bioactive agent comprising
     administering to the respiratory tract of a patient in need of treatment,
     or diagnosis an effective amount of particles comprising a bioactive agent
     or any combination thereof in association, wherein release of the agent from
     the administered particles occurs in a rapid fashion. Formulation of a
     dry powder inhalant containing DPPC 70, leucine 10, and
     insulin 20% is disclosed.
AN
    2003:512067 HCAPLUS <<LOGINID::20100623>>
DN
    139:74074
ΤI
    Particles for inhalation having rapid release properties
IN Schmitke, Jennifer L.; Chen, Donghao; Batycky, Richard P.; Edwards, David
PA
    Advanced Inhalation Research, Inc., USA
SO
    U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of U.S. Ser. No. 888,126.
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- CODEN: USXXCO
- Patent T.A
- English
- FAN.CNT 11

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

- L13 ANSWER 18 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Pulmonary delivery of aminoglycosides

AB The present invention is directed to the administration of aminoglycosides. In particular, the present invention is directed to compns. and methods for the pulmonary administration of aminoglycosides. According to a preferred embodiment, compns. and methods are provided for the localized treatment of respiratory infections. Dry powder compns. containing gentamicin were prepared by mixing gentamicin sulfate and excipients (e.g., L-leucine) with a liquid medium to form a solution The solution was spray dried to give a powder composition

- AN 2003:511125 HCAPLUS <<LOGINID::20100623>>
- DN 139:74044
- TI Pulmonary delivery of aminoglycosides
- IN Tarara, Thomas E.; Weers, Jeffry G.; Venthoye, Geraldine
- PA Nektar Therapeutics, USA
- SO PCT Int. Appl., 39 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

FAN.							KIND DATE			APPLICATION NO.									
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								SD,											
								VN.					,					,	
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	CA	AU 2002361897 US 20030129140 US 7368102				A1	A1 20030709			CA 2002-2468958						20021219 <			
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	US					A1													
	US					B2 20080506 A1 20040922													
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		20080063606										007-	9819	86		2	0071	031 -	<
PRAI		2001-342827P																	
		2002																	
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 19 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Spray drying methods for powder blends
- AB A method and apparatus are provided for atomixing a liquid under dispersal conditions suitable for spray drying at a com. plant scale. In one embodiment, a liquid atomizer has a structural body adapted for connection with a spray dryer and a plurality of atomixing nozzles. Each of the atomixing nozzles includes a liquid nozzle adapted to disperse a supply of liquid and a gas nozzle adapted to disperse a supply of gas. In another embodiment, a process for producing a powder blend of at least two target substances, e.g., a corticosteroid and a β -blocker, in a single processing step is provided. Blending capabilities were evaluated using buffer solns. consisting of monobasic sodium phosphate or dibasic sodium phosphate with leucin in a 1:1 ratio at 1% total solids concentration AN 2003:356227 McAPLUS <<0.00INID::20100623>>
- DN 138:358554
- TI Spray drying methods for powder blends
- IN Snyder, Herman E.; Vosberg, Michael J.; Varga, Christopher M.
- PA Inhale Therapeutic Systems, Inc., USA
- SO PCT Int. Appl., 55 pp.
- CODEN: PIXXD2 DT Patent
- LA English FAN.CNT 1

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		24646	556			A1		2003	0508		CA 2	002-	2464	656		2	0021	031	<
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	ΑU	20092	2025	78		A1		2009	0716		AU 2	009-	2025	78		2	0090	626	<
PRAI	US	20072 20092 2001-	-336	538P		P		2001	1101	<-	-								
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		2002-																	
		2002-								<-	-								
	ΑU	2007-	-202	862		A3		2007	0620										

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 20 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- The use of proton sequestering agents in drug formulations
- AB Methods are provided for preparing spray-dried, drug-containing particles with improved stability comprising the steps of: (a) selecting a drug, e.g., a therapeutic protein, an aqueous solution, and a proton-sequestering agent; (b) adding the drug and the proton-sequestering agent to the solution to form a feed solution; and (c) spray drying the feed solution to form the spray-dried, drug-containing particles, wherein at least a portion of the proton-sequestering agent remains mixed with the drug in the spray-dried, drug containing particles. Proton sequestering agents are selected from amino acids, oligopeptides, short-chain fatty acids, and carboxylic acid salts. Particles and pharmaceutical formulations comprising the prepared particles as well as methods of use are also provided. For example, to control the degradation rate of parathyroid hormone by decreasing the amount of protons

(and

water) relative to the amount of the drug, a formulation containing 0.8% parathyroid hormone, 79.2% sucrose, 20% leucine, and 2% disodium citrate was prepared at pH 4, having a 0.5% total solids with a volume of 50 mL. The resulting powder contains 2 mg (0.49 µmol) parathyroid hormone, 193 mg (564 µmol) sucrose, 50 mg (12 µmol) leucine, 5 mg (21 umol) disodium citrate, and 5 umol of acid.

- AN 2003:334889 HCAPLUS <<LOGINID::20100623>>
- DN 138:343903
- The use of proton sequestering agents in drug formulations
- Lehrman, S. Russ; Chiang, Hi-Shi; Kuo, Mei-Chang; Zhang, Jiang; Lechuga-Ballesteros, David
- PA Inhale Therapeutic Systems, Inc., USA
- PCT Int. Appl., 44 pp. SO
- CODEN: PIXXD2
- DT Patent LA English

FAN.	CNT	1																
	PA'	TENT :	NO.			KIN	D	DATE			APPL	ICAT:	ION :	NO.		D.	ATE	
							-									-		
PI	WO	2003	0350	51		A2		2003	0501		WO 2	002-1	US33	017		2	0021	016 <
	WO	2003	0350	51		A3		2004	0311									
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			UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
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			KG,	KZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
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	AU	2002	3350	46		A1		2003	0506		AU 2	002-	3350	46		2	0021	016 <
	US	2005	0013	867		A1		2005	0120		US 2	004-	4931	82		2	0040	909 <
PRAI	US	2001	-330	074P		P		2001	1019	<-	-							
	WO	2002	-US3	3017		W		2002	1016	<-	-							
ASSI	GNM	ENT H	ISTO	RY F	OR U	S PA	TENT	AVA	ILAB:	LE I	N LS	US D	ISPL.	AY F	AMRC	Г		

OSC.G 2

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS) RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 21 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TT Modulating charge density to produce improvements in the characteristics of spray-dried proteins
- Methods are provided for preparing spray-dried, drug-containing particles

comprising the steps of selecting (i) a drug and an optional excipient, wherein the combination of the drug and optional excipient has an effective pI, and (ii) an aqueous solution having a pH that is different from

the
effective pI; (b) combining the solution and the drug and optional excipient,
wherein an absolute net charge is associated with the drug and optional

as a result of an absolute difference between the pH and effective pI, and (c) spray drying the solution to form the spray-dried, drug-containing particles. Particles and compns. comprising the prepared particles as well as methods of use are also provided. For example, 1 mg/ml of interferon- β was mixed with 9 mg/ml raffinose and titrated with RCl to pH 4.0. The solution was spray dried to form particles for pulmonary delivery with ED of 67%.

AN 2003:334869 HCAPLUS <<LOGINID::20100623>>

DN 138:343893

excipient

TI Modulating charge density to produce improvements in the characteristics of spray-dried proteins

IN Lehrman, S. Russ; Stevenson, Cynthia; Yang, Bing

PA Inhale Therapeutic Systems, Inc., USA

SO PCT Int. Appl., 44 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.	UNT I																	
	PATEN:	NO.			KIN	D	DATE			APPL	ICAT	ION:	NO.		D	ATE		
						_												
PI	WO 200	30350	28		A1		2003	0501		WO 2	002-	US33	016		2	0021	016 <-	
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	US 200	50123	509		A1		2005	0609		US 2	004-	4931	81		2	0041	102 <-	
PRAI	US 200	1-330	073P				2001	1019	<-	-								
	WO 200)2-US3	3016		W		2002	1016	<-	-								

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 22 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN TI Dry powder inhalation system for transpulmonary

administration

AB It is intended to provide a novel dry powder inhalation system for transpulmonary administration. This dry powder inhalation system for transpulmonary administration contains a single dose of the active ingredient and is characterized by comprising a combination of a container packed with a freeze-dried composition having the following properties: (i) being in the form of a non-powder cake; (ii) having a decay index of ≥ 0.015; and (iii) upon an air impact having an air speed of at least 1 m/s and an air flow rate of at least 17 mL/s, being disintegrated into fine particles having an average particle diameter of ≤ 10 µm or an effective particle ratio of ≥ 10%; with a device provided with means

of imparting the above air impact to the freeze-dried composition in the above container and means of discharging the powdery freeze-dried composition having been disintegrated into fine particles from the container. A

freeze-dried cake was prepared from interferon- α and isoleucine, and

applied to an inhaler of the present invention for transpulmonary powder administration.

- 2002:977700 HCAPLUS <<LOGINID::20100623>> AN
- DN 138:44733
- Dry powder inhalation system for transpulmonary TI
- administration
- Yamashita, Chikamasa; Ibaragi, Shigeru; Fukunaga, Yuichiro; Akagi, Akitsuna
- PA Otsuka Pharmaceutical Co., Ltd., Japan
- PCT Int. Appl., 121 pp. SO
- CODEN: PIXXD2
- DT Patent
- LA Japanese
- FAN.CNT 2

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PΙ	WO 2002102445		WO 2002-JP5955	20020614 <
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	EG 24184	A 20081008	EG 2002-661	20020612 <
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	CN 1516606	A 20040728	CN 2002-811941 BR 2002-10425	20020614 <
	CN 100427077	C 20081022		
	BR 2002010425	A 20040817	BR 2002-10425	20020614 <
	HU 2004000217	A2 20040928	HU 2004-217 NZ 2002-530044 EP 2006-10991	20020614 <
	NZ 530044	A 20050930	NZ 2002-530044	20020614 <
	EP 1688133	A1 20060809	EP 2006-10991	20020614 <
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	EP 1688134	A3 20091118		
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	AT 336989	T 20060915	AT 2002-736105	
	PT 1402913	E 20061229	PT 2002-736105	20020614 <
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A3 20031209 <--
A3 20031215 <--
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KR 2003-716433
       ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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OSC.G 1 ALL CITATIONS AVAILABLE IN THE RE FORMAT

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD

L13 ANSWER 23 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN

TI GLP-1 formulations with protracted time action

AB The present invention encompasses compns. wherein a GLP-1 compound is complexed with a basic polypeptide. The compns. provide a prolonged duration of action and can be administered by the pulmonary

2002:946049 HCAPLUS <<LOGINID::20100623>> AN

DN

TI GLP-1 formulations with protracted time action

Defelippis, Michael Rosario; Havel, Henry Acken; Mace, Kenneth Francis; IN Ng, Kingman; Sarin, Virender Kumar

PA Eli Lilly and Company, USA

SO PCT Int. Appl., 89 pp.

CODEN: PIXXD2

DT Patent LA English FAN.CNT 1

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    AU 2002308706
                        A1
                                       JP 2003-501390
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    US 7144863
                       B2
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PRAI US 2001-295282P
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    WO 2002-US15137
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                             20020521 <--
    MARPAT 138:44696
OSC.G 4
            THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
RE.CNT 3
            THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13 ANSWER 24 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
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- TΙ Particles for inhalation having rapid release properties
- AB The invention generally relates to formulations having particles comprising phospholipids, bioactive agent and excipients and the pulmonary delivery. Dry powder inhaled insulin formulations are disclosed. Formulations comprising DPPC, insulin and sodium citrate which are useful in the treatment of diabetes are disclosed. Also, the invention relates to a method for the pulmonary delivery of a bioactive agent comprising administering to the respiratory tract of a patient in need of treatment, or diagnosis an effective amount of particles comprising a bioactive agent or any combination thereof in association, wherein release of the agent from the administered particles occurs in a rapid fashion. Thus, an insulin powder formulation contained DPPC 70, leucine 10, and insulin 20% by weight
- 2002:754972 HCAPLUS <<LOGINID::20100623>> AN
- 137:268470 DN
- TI Particles for inhalation having rapid release properties
- TN Schmitke, Jennifer L.; Chen, Donghao; Batycky, Richard P.; Edwards, David A.; Hrkach, Jeffrey S.
- Advanced Inhalation Research, Inc., USA
- U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S. Ser. No. 752,109. CODEN: USXXCO
- DT Patent
- LA English
- FAN CNT 11

T LILY .	PATENT NO. KIND DATE APPLICATION NO. DATE																	
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
L13 ANSWER 25 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
    Pulmonary delivery of polyene antifungal agents
    The present invention provides spray-dried polyene antibiotic compns. for
AB
    oral inhalation to the lung. The compns. demonstrate superior
    aerosol properties, do not exhibit appreciable degradation of the polyene upon
    spray-drying, and are useful in the treatment and prophylaxis of both
    pulmonary and systemic fungal infections. For example, spray
    drying a nearly neutral pH aqueous solution of amphotericin B with sodium
    deoxycholate provided a powder having a good dispersibility (an
    emitted dose of greater than 70%) and a good mass median aerodynamic diameter
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- AN 2002:539453 HCAPLUS <<LOGINID::20100623>>
- DN TΙ
- Pulmonary delivery of polyene antifungal agents IN Weickert, Michael; Gordon, Marc S.; Kumar, Sandeep; Yang, Bing; Sarwar, Razaq
- PA Inhale Therapeutic Systems, Inc., USA

(MMAD) of less than 3.0 µ.

- SO PCT Int. Appl., 57 pp.
- CODEN: PIXXD2
- DT Pat.ent.
- LA English

FAN.	CNT 15																
	PATENT	NO.			KIN	D	DATE			APPL	ICAT	I NOI	NO.		D	ATE	
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
```

- L13 ANSWER 26 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Particles for inhalation having sustained release properties

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- containing positively charged lipids
- AB The invention generally relates to a method for pulmonary delivery of therapeutic, prophylactic and diagnostic agents to a patient wherein the agent is released in a sustained fashion, and to particles suitable for use. In particular, the invention relates to a method for the pulmonary delivery of a therapeutic, prophylactic or diagnostic agent comprising administering to the respiratory tract of a patient in need of treatment, prophylaxis or diagnosis an effective amount of particles comprising a therapeutic, prophylactic or diagnostic agent or any combination thereof in association with a charged lipid, wherein the charged lipid has an overall net charge which is opposite to that of the agent upon association with the agent. Release of the agent from the administered particles occurs in a sustained fashion. In vivo release data showed that powder formulations comprising insulin and pos. charged lipids (1,2-dipalmitoyl-sn-qlycero-3-ethylphosphocholine or 1,2-distearovl-sn-glycero-3-ethylphosphocholine) have lower initial burst of insulin than that seen with powder formulations comprising insulin and DPPC and sustained elevated levels at 6-8 h.

THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

- AN 2002:521543 HCAPLUS <<LOGINID::20100623>>
- DN 137:83673

OSC.G 6

RE.CNT 5

- TI Particles for inhalation having sustained release properties containing positively charged lipids
- IN Basu, Sujit K.; Hrkach, Jeffrey S.; Lipp, Michael; Elbert, Katharina; Edwards, David A.

PA Advanced Inhalation Research, Inc., USA

SO. PCT Int. Appl., 56 pp.

CODEN: PIXXD2

Patent DT LA English

FAN.CNT 11 KIND DATE APPLICATION NO. DATE PATENT NO.

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OS MARPAT 137:83673

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS) RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 27 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- ΤI Inhalable aztreonam for treatment and prevention of pulmonary bacterial infections
- A method and a composition are described for the treatment of pulmonary bacterial infections caused by gram-neg. bacteria. The invention also relates to the treatment of infection caused by microorganisms such as Escherichia coli, Klebsiella pneumoniae, Pseudomonas aeruginosa, Haemophilus influenzae, Burkholderia cepacia, Stenotrophomonas maltophilia, and multidrug resistant Pseudomonas aeruginosa by using a concentrated formulation of aztreonam, or a salt delivered as an aerosol or dry powder formulation. A purified aztreonam or a salt is milled to a powder having mass median average diams. ranging $1-5~\mu$ by media

milling, jet milling, spray drying, or particle precipitation techniques. Spray drying is achieved by spraying a fine mist of drug solution onto a support and drying the particles. The dry powder formulations are temperature stable and have a physiol. acceptable pB of 4.0-7.5, preferably 5.5 to 7.0, and long shelf-lives.

AN 2002:504571 HCAPLUS <<LOGINID::20100623>>

DN 137:83631

I Inhalable aztreonam for treatment and prevention of

pulmonary bacterial infections

IN Montgomery, Alan Bruce

PA Salus Pharma, Inc., USA

SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2 DT Patent

LA English

LA	Eng	glish
FAN.	CNT	4

	PATENT NO.																
PI	WO	20020513	56		A2			0704				US50				0011	
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OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 28 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI An amino acid, a phospholipid, or a stearate additive in preparation of particles for pulmonary administration
 - B \(\text{\text{\$\text{\$M}}} \) method for making composite active particles for use in a pharmaceutical composition for pulmonary administration comprises a milling step in which particles of active material (drug) are milled in the presence of particles of an additive material, i.e., an amino acid, a phospholipid, or a metal stearate, suitable for the promotion of the dispersal of the composite active particles upon actuation of an inhaler. The invention also relates to compns. for inhalation prepared by the method. For example, 5 g of micronized salbutamol sulfate (particle size distribution 1-5 \(\text{\$\mu\$} \) m) and 0.5 g of magnesium stearate were added to a stainless steel milling vessel together with 20

 $\mbox{cm3}$ dichloromethane and 124 g of 3 mm stainless steel balls. The mixture was milled at 550 rpm for 5 h and the powder was recovered by drying and sieving to remove the mill balls. The procedure was repeated using leucine in place of the magnesium stearate. The powders obtained

appear to have particles in the size range $0.1-0.5~\mu m$. 2002:428687 HCAPLUS <<LOGINID::20100623>>

DN 137:10986

AN

- An amino acid, a phospholipid, or a stearate additive in preparation of particles for pulmonary administration
- IN Staniforth, John Nicholas; Green, Matthew Michael James; Morton, David Alexander Vodden
- PA Vectura Limited, UK
- SO PCT Int. Appl., 41 pp.
- CODEN: PIXXD2 DT Patent

LA		tent glish																	
FAN.	PA	TENT				KIN		DATE									ATE		
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								IS,											
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 29 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Particles for inhalation having sustained release properties

AB The invention generally relates to a method for pulmonary delivery of therapeutic, prophylactic and diagnostic agents to a patient wherein the agent is released in a sustained fashion, and to particles suitable for use in the method. In particular, the invention relates to a method for the pulmonary delivery of a therapeutic, prophylactic or diagnostic agent comprising administering to the respiratory tract of a patient in need of treatment, prophylaxis or diagnosis an effective amount of particles comprising a therapeutic, prophylactic or diagnostic agent or any combination thereof in association with a charged lipid, wherein the charged lipid has an overall net charge which is opposite to that of the agent upon association with the agent. The lipid is a 1,2-diacyl-sn-glycero-3-[phospho-rac-(1-glycerol)] and a 1,2-diacvl-sn-glycerol-3-phosphate. Release of the agent from the administered particles occurs in a sustained fashion. A DPPC/citrate/insulin (60/10/30) spray drying solution was prepared by dissolving 600 mg DPPC in 600 mL of ethanol, dissolving 100 mg of sodium citrate and 300 mg of insulin in 400 mL of water and then mixing the two solns. to yield 1 L of cosolvent with a total solute concentration of 1 g/L.

The

solution was then used to produce dry powders using an atomizer.

AN 2002:332667 HCAPLUS <<LOGINID::20100623>>

DN 136:345816

I Particles for inhalation having sustained release properties

IN Edwards, David A.; Langer, Robert S.; Vanbever, Rita; Mintzes, Jeffrey; Wang, Jue; Chen, Donghao

PA Massachusetts Institute of Technology, USA; The Penn State Research Foundation
SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 394,233.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20020052310 US 5985309	A1 A A1 , DE, DK	20020502 19991116 20050119 , ES, FR,	US 2000-752106 US 1997-971791 EP 2004-19571 GB, GR, IT, LI, LU, NL,	19971117 < 19971117 <
PRA.	US 6652837 US 20030118513 US 7048908 US 7628977 US 20040062718 US 20040062718 US 20070014738 US 1997-59004P US 1997-971791 US 1999-394233 US 1996-655570 US 1996-739308 US 1997-784421	B1 A1 B2 B2 A1 A9 A1 P A2 A2 B2 A3 A1	20031125 20030626 20060523 20091208 20040401 20081016 20070118 19970915 19971117 19990913 19960524 19961029 19970116	US 1999-394233 US 2002-202616 US 2003-420071 US 2006-523914 < < < < <	19990913 < 20020723 < 20030418 < 20060920 <

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US 1998-211940 A2 19981215 <--
US 2000-569153 A2 20000511 <--
US 2000-752106 B1 20001229 <--
US 2003-420071 A1 2030418 <--
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 136:345816

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

- L13 ANSWER 30 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Particles for inhalation having insulin sustained release properties
- AB The invention generally relates to a method for pulmonary delivery of therapeutic, prophylactic and diagnostic agents to a patient wherein the agent is released in a sustained fashion, and to particles suitable for use in the method. In particular, the invention relates to a method for the pulmonary delivery of a therapeutic, prophylactic or diagnostic agent comprising administering to the respiratory tract of a patient in need of treatment, prophylaxis or diagnosis an effective amount of particles comprising a multivalent metal cation which is complexed with a therapeutic, prophylactic or diagnostic agent or any combination thereof having a charge capable of complexing with the cation upon association with the agent, a pharmaceutically acceptable carrier and optionally, a multivalent metal cation-containing component wherein the total amount of multivalent metal cation present in the particles is more than 1% weight/weight of the total weight of the agent from

the
administered particles occurs in a sustained fashion. A composition was
prepared

containing DPPC 58.8, leucine 24.4, zinc chloride 6.4, Na citrate 5.9, and insulin 4.9%.

- AN 2002:221109 HCAPLUS <<LOGINID::20100623>>
- DN 136:252507
- TI Particles for inhalation having insulin sustained release
- properties
- IN Edwards, David A.; Hrkach, Jeffrey S.
- PA Advanced Inhalation Research Inc., USA; Alkermes, Inc. SO U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U.S. Ser. No. 383
 - O U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U. S. Ser. No. 383,054. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 2

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PRAI US 1999-383054 A2 19990825 <--

US 1998-97796P P 19980825 <--

US 2001-822716 A 20010330 <--

WO 2002-US9697 W 20020327 <--
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 365 THERE ARE 365 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 31 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Inhalable spray dried 4-helix bundle protein powders having minimized aggregation
- AB The present invention provides highly dispersible spray-dried powder compns., and in particular, inhalable dry powder compns. for aerosolized delivery o the lungs. The powders of the invention are produced by spray drying a 4 \(\alpha\)-helix bundle protein under conditions which both: (i) protect the protein from aggregation and (ii) provide particles suitable for inhalation (i.e., demonstrating superior aerosol performance).
- AN 2002:122759 HCAPLUS <<LOGINID::20100623>>
- DN 136:172776
- TI Inhalable spray dried 4-helix bundle protein powders having minimized aggregation
- IN Stevenson, Cynthia; Hastedt, Jayne E.; Lehrman, S. Russ; Chiang, Hi-Shi; Bennett, David B.; Lesikar, David; Yang, Bing; Gong, David; Cabot, Kirsten PA Inhale Therapeutic Systems, Inc., USA
- SO PCT Int. Appl., 59 pp.
- CODEN: PIXXD2
- DT Patent
- LA English

PAN.		ENT NO			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE		
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US 2001-923519 A1 20010807 <--US 2003-389628 A1 20030314 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

- L13 ANSWER 32 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Preparation of particles for pharmaceutical compositions
- AB A method for making composite excipient particles for use in a pharmaceutical composition comprises a milling step in which particles of an excipient material are milled in the presence of an additive material. The product particles are of small size and the milling requires relatively low input of time and energy. The composite particles are suitable for use in inhalable pharmaceutical compns. Microfine lactose was placed in a ceramic milling vessel. An additive material and the ceramic milling balls were added. The ball mill was tumbled at 60 rpm for 5 h. This was repeated a number of times with the amount of additive material varied as a percentage of the lactose from 0.25 to 20%. Additive materials used were L-leucine and magnesium stearate. The powder was recovered by sieving to remove the milling balls.
- AN 2002:10258 HCAPLUS <<LOGINID::20100623>>
- DN 136:74642
- TI Preparation of particles for pharmaceutical compositions
- IN Staniforth, John Nicholas; Morton, David Alexander Vodden; Musa, Rosella
- PA Vectura Limited, UK SO PCT Int. Appl., 38 pp.
- CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 11

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            JP 2004501183 T 20040115 JP 2002-504979
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                                                            B2 20051117 AU 2001-269261
A 20051223 WG 2001
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           NZ 523246
                                                                                                                                                                   20010627 <--
           NZ 52246 A 20051223 NZ 2001-523246
KR 949539 B1 2010325 KR 2002-717595
ZA 2002008066 A 20030805 ZA 2002-8066
ZA 2002010225 A 20030818 ZA 2002-10225
IN 2002CN02129 A 20050225 IN 2002-CN2129
IN 204312 A1 20070629
US 20030162835 A1 20030828 US 2003-312488
HK 1056115 A1 20080808 HK 2003-106950
EP 2000-113608 A 20001627 <--
EP 2001-981732 W 20010417 <--
EP 2001-981732 A 20000417 <--
EP 2001-9915162 A3 20010417 <--
EN 2001-6B2860 W 20010627 <--
EN 2001-6B2860 W 20010627 <--
EN 2001-6B2860 W 20010417 E--
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PRAI EP 2000-113608
GB 2000-29263
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 7
                                 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
                                  ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13 ANSWER 33 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
           Powders for use in a dry powder inhaler
TI
AB
           A powder for use in a dry powder inhaler
            comprises an active material and an indicator material that is capable of
            indicating to a patient that a dose of the active material has been
            administered. The powder for use in an inhaler device
            and/or an inhaler device containing the powder may be such
            that a fine particle fraction of at least 35% is
            generated. Thus, a formulation contained sodium cromoglycate 50.0,
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- lactose 48.5, and menthol 1.5%.
 AN 2001:816434 HCAPLUS <<LOGINID::20100623>>
- DN 135:362566 TI Powders for use in a dry powder inhaler
- IN Staniforth, John Nicholas; Morton, David Alexander Vodden; Meakin, Brian John; Ganderton, David
- PA Vectura Limited, UK SO PCT Int. Appl., 28 pp.
- CODEN: PIXXD2
- DT Patent
- LA English
- FAN CNT 1

FAN.	CNT	1																	
	PAT	CENT I	.00			KIN	D	DATE			APPL	ICAT:	ION	NO.		D	ATE		
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PI	WO	2001	0829	06		A1		2001	1108		WO 2	001-0	GB19	42		2	0010	503 <	
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US 20030186843 A1 20031002 US 2003-275023 20030602 <--PRAI GB 2000-10709 A 20000503 <--

WO 2001-GB1942 W 20010503 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 34 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Formulations containing fine lactose for use in inhaler devices
- AB A formulation for an inhaler device comprises carrier particles having a diameter of at least 50 μm and a mass median diameter of at least 175 μm ; active particles; and additive material to which is able to promote release of the active particles from the carrier particles on actuation of the inhaler device. The formulation has excellent flowability even at relatively high fine particle contents. A formulation contained lactose, salbutamol sulfate, microfine lactose, and leucine.
- AN 2001:780655 HCAPLUS <<LOGINID::20100623>>
- DN 135:335150
- TI Formulations containing fine lactose for use in inhaler devices
- IN Staniforth, John Nicholas; Morton, David Alexander Vodden; Gill, Rajbir; Brambilla, Gaetano; Musa, Rossella; Ferrarini, Lorenzo
- PA Vectura Ltd., UK
- SO PCT Int. Appl., 63 pp. CODEN: PIXXD2
- CODEN: P
- DT Patent
- LA English

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OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

L13 ANSWER 35 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Modulation of release from dry powder formulations

- AB Particles which include a bioactive agent are prepared to have a desired matrix transition temperature Delivery of the particles via the pulmonary system results in modulation of drug release from the particles. Sustained release of the drug can be obtained by forming particles which have a high matrix transition temperature, while fast release can be obtained by forming particles which have a low matrix transition temperature Preferred particles include one or more phospholipids. Thus, 20% albumin was mixed with 80% 1,2-dipalmitoyl-sn-qlycero-3phosphatidylcholine (I) or 1,2-distearovl-sn-glycero-phosphahtdiylcholine (II) and spray-dried using 70% ethanol and 30% water. Matrix transition temperature for particles formulated with I was lower than that for particles formulated with II.
- AN 2001:152464 HCAPLUS <<LOGINID::20100623>>
- DN 134:198097
- ΤТ Modulation of release from dry powder formulations
- TN Basu, Sujit K.; Hrkach, Jeffrey S.; Caponetti, Giovanni; Lipp, Michael M.; Elbert, Katharina; Li, Wen-I.
- PA Advanced Inhalation Research, Inc., USA
- SO PCT Int. Appl., 49 pp.
- CODEN: PIXXD2 DT Patent
- LA English
- FAN.CNT 2

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E	P 121006	7		A2		2002	0605		EP 2	000-	9576	74		2	0000	323	<
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	P 200350																
	U 763041									000-	6925	9		2	00001	323	<
PRAI U	S 1999-1	50742P		P		1999	0825	<-	-								
M	O 2000-U	S23048		W		2000	0823	<-	_								
		THERE													ring:	3)	
RE.CNT	5	THERE	ARE .	5 CI	TED	REFE	RENC	ES A	VAIL	ABLE	FOR	THI	S RE	CORD			

- ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L13 ANSWER 36 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- Powders consisting of particles with a perfectly smooth surface, for use as carriers for the preparation of inhalation mixtures with micronized drugs and method for their preparation
- Carriers for use in the preparation of mixts. for inhalation powders intended for pulmonary administration of micronized drugs by means of a dry powder inhaler and the method for their preparation are described. An inhalation powder of beclometasone dipropionate mixed with smoother a-lactose monohydrate carrier was prepared
- AN 2001:63851 HCAPLUS <<LOGINID::20100623>>
- DN 134:120962
- Powders consisting of particles with a perfectly smooth surface, for use

- as carriers for the preparation of inhalation mixtures with micronized drugs and method for their preparation $\,$
- IN Caponetti, Giovanni; Catellani, Pier Luigi; Bettini, Ruggero; Colombo, Paolo; Ventura, Paolo
- PA Chiesi Farmaceutici S.p.A., Italy
- SO PCT Int. Appl., 39 pp. CODEN: PIXXD2
- DT Patent
- LA English FAN.CNT 1

1 1111			NO.			KIN		DATE			APP	LICA	TION	NO.		D.	ATE		
PI		2001				A2					WO	2000	-EP66	90		2	0000	713	<
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	EP	1196	146			B1		2006	0913										
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	US 2002-30686														00143	m			
	ASSIGNMENT HISTORY FOR																		
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THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

- ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L13 ANSWER 37 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN TI Pulmonary administration of dry powder formulations for treating infertility
- AB Provided are stabilized follicle stimulating protein (FSP) dry powder compns. for aerosolized delivery to the deep lung, methods of preparing and administering such compns., and methods for treating infertility involving administering the dry powders by pulmonary delivery to the deep lung.
- AN 2000:741950 HCAPLUS <<LOGINID::20100623>>
- DN 133:313613

RE.CNT 2

- TI Pulmonary administration of dry powder formulations for treating infertility
- IN Nagarajan, Sudha; Patton, John S.; Bennett, David B.; Greene, Joanne; Chiang, Hi-Shi; Stults, Cheryl L. M.; Venthoye, Geraldine; Allen, Darrel Lavern; Hughes, Benjamin Lee; Stiff-Torvik, Mary; Wolff, Ronald Keith; Roeder, William David
- PA Inhale Therapeutics, Inc., USA; Eli Lilly and Company
- SO PCT Int. Appl., 125 pp.
- CODEN: PIXXD2
- DT Patent

LA English FAN. CNT 1

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	AU	7798	69			B2		2005	0217		AU 2	000-	4082	0		2	0000	413	<
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	US	1999	-130	099P		P		1999	0420	<-	-								
	WO	2000	-US9	869		W		2000	0413	<-	-								
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- L13 ANSWER 38 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- Methods and compositions for the dry powder formulation of

ALL CITATIONS AVAILABLE IN THE RE FORMAT

interferons AB Methods and compns. are provided for spray-dried, interferon-based dry powder compns., particularly interferon-beta. The compns. are useful for treating conditions in humans that are responsive to treatment with interferons. In particular, the methods of the present invention rely on spray drying to produce stable, high-potency dry powder formulations of interferons, including but not limited to IFN-beta. Surprisingly, it has been found that IFN can be prepared in high potency, dry powder formulations by spray drying. Such dry powder formulations find particular utility in the pulmonary delivery of IFN. Approx. 50 mL of 10 mM sodium chloride solution of natural human IFN-beta comprising approx. 2 mg/mL human serum albumin was spray dried to give a composition comprising IFN-beta 1.9, and carrier (75.8% human serum albumin, 22.3% NaCl) 98.1%.

- AN 2000:680347 HCAPLUS <<LOGINID::20100623>>
- DN 133:256828 TI Methods and compositions for the dry powder formulation of interferons
- IN Platz, Robert M.; Kimura, Shigenobu; Satoh, Yu-ichiro; Foster, Linda C.
- PA Inhale Therapeutics Systems, Inc., USA
- SO U.S., 7 pp.
- CODEN: USXXAM
- DT Patent
- LA English

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E MIN.	NI ZI				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6123936	A	20000926	US 1999-444116	19991122 <
	EP 940154	A2	19990908	EP 1999-110369	19920702 <
	EP 940154	B1	20070418		

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE
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                            A2 20060823 EP 2006-9725
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      EP 1693080
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                                    20070725
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     AT 359842 T 20070515 AT 1999-110369 19920702 <--
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     US 20030072718 A1 20030417 US 2002-245704
                                                                           20020918 <--
PRAI US 1991-724915 A 19910702 <--
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                           W
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     US 1997-737724
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                           A1 19991122 -
A1 20000217 <--
     US 1999-444116
US 2000-506426
                                   19991122 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS) OSC.G 8 RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L13 ANSWER 39 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
- TI Pharmaceutical powders comprising particles of an amino acid
- AB Particles of an amino acid such as leucine may be formed from an amino acid vapor, for example by aerosol condensation, or by spray drying. The amino acid particles have a bulk d. of not more than 0.1 gcm-3 or have a mass median aerodynamic diameter of not more than 10 <mm or are in the form of flakes having a thickness of not more than 100 <mm. The inclusion of the particles of amino acid in powder for use in dry powder inhalers has been found to improve the respirable fraction of the active material in the powder. Ground L-leucine particles were suspended from a fluidized bed by a flow of air and carried in a gas flow into the tube furnace, which was at a temperature ranging from 150-300° and sublimed. The vapor emitted from the furnace was mixed with cool air giving a cloud of condensed particles that were subsequently collected in a cyclone and membrane filter. The balk d. of the powder was 0.04 gcm-3. A mixture of salbutamol sulfate and 1% low d. leucine was prepared The powder flow and handling performance of the salbutamol powder was significantly improved, with minimal adhesion to glass walls compared with the milled leucine mixture
- AN 2000:401625 HCAPLUS <<LOGINID::20100623>>
- DN
- TI Pharmaceutical powders comprising particles of an amino acid
- IN Ganderton, David; Morton, David Alexander Vodden; Lucas, Paul PA Vectura Limited, UK
- SO PCT Int. Appl., 45 pp.
- CODEN: PIXXD2
- DT Patent
- LA English

FAN.	CNT	1																	
	PA:	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE		
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PI	WO	2000	0338	11		A2		2000	0615		WO 1	999-	GB41	56		1	9991:	209 <-	
	WO	2000		A3		2000	1012												
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       CA 2353448 A1 20000615 CA 1999-2353448 19991209 <--
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                               A 20010904 BR 1999-16102
A2 20011004 EP 1999-958404
B1 20030514
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       EP 1137399
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       TR 2001001591 T2 20011121
TR 2001001591 T2 20011121 TR 2001-1591 HU 2001004513 A2 20020328 HU 2001-4513 HU 2001004513 A3 20031229 JP 2002531487 T 20020924 JP 2000-586305 JP 4410942 B2 20100210 AT 240093 T 20030515 AT 1999-958404 NZ 511965 A 20030926 NZ 1999-511965 PT 1137399 E 20030930 PT 1999-958404 AD 770461 B2 20040210 ES 1999-51965 AD 770461 B2 20040219 AD 2000-15777 SK 284775 B6 2005103 SK 2001-777 MX 2001005584 A 20030714 MX 2001-5584 IN 200100586 A 20050304 IN 2011-6N766 NO 2001002825 A 2001068 NO 2001-2825 US 6989155 B1 20060124 US 2001-857392 PRAI GB 1998-27145 A 19981209 <---

PRAI GB 1998-27145 A 19981209 <---

WO 1999-GB4156 W 19991209 <---

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORM
                                                       TR 2001-1591
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
RE.CNT 3
                   THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
                  ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13 ANSWER 40 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
      Excipient powders for inhalable drugs
AB
       The present invention relates to inhalable drugs in particulate
       form. More specifically, the present invention is directed to an
       excipient powder that comprises a coarse first fraction having a
       particle size of ≥ 10 µm, a fine second
       fraction having a particle size of < 10 µm and a third
       fraction consisting of ternary agents. The excipient powder has
       been found to be beneficial in the administration of pharmaceuticals to
       the pulmonary system. A carrier formulation was prepared containing
       coarse lactose (> 80 % by mass over 50 µm in size) 89, fine
       lactose (> 90 % by mass < 10 µm in size) 10, and fine
       L-leucine (> 90 % by mass < 10 µm in size) 1 %. The carrier
       formulation was blended with 2 % of a corticosteroid. The mean respirable
       fraction was .apprx. 60 %, compared to .apprx. 40 % for the formulation
       without L-leucine.
AN 2000:401604 HCAPLUS <<LOGINID::20100623>>
     133:34444
DN
TI Excipient powders for inhalable drugs
IN Embleton, Jonathan Kenneth
      R.P. Scherer, Inc., USA
PA
     PCT Int. Appl., 13 pp.
SO
      CODEN: PIXXD2
DT
      Patent
LA
      English
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FAN.CNT 1

FATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2000033789 A2 20000615 WO 1999-US28608 19991203 <-
WO 2000033789 A3 20000914

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,

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             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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                                19981204 <--
     WO 1999-US28608
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OSC.G
              THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 1
              THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13 ANSWER 41 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
TI
     Enhancement of small particle size dry powder aerosol
     formulations using an ultra low density additive
     Low d. L-leucine was used to modify the bulk properties of salbutamol
     formulations. The potential of L-leucine to facilitate emptying of formulation of a model small mol. drug from a multi-dose pre-metered
     inhaler device was examined
AN
     1999:707291 HCAPLUS <<LOGINID::20100623>>
DN
     132:40462
ΤI
     Enhancement of small particle size dry powder aerosol
     formulations using an ultra low density additive
AU
     Lucas, Paul; Anderson, Kerry; Potter, Ursula J.; Staniforth, John N.
CS
     Department of Pharmacy and Pharmacology, University of Bath, Bath, BA2
     7AY, UK
SO
     Pharmaceutical Research (1999), 16(10), 1643-1647
     CODEN: PHREEB: ISSN: 0724-8741
PR
     Kluwer Academic/Plenum Publishers
     Journal
LA
    English
OSC.G 50
              THERE ARE 50 CAPLUS RECORDS THAT CITE THIS RECORD (50 CITINGS)
RE.CNT 13
              THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13 ANSWER 42 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
ΤI
     Aerosol composition comprising a propellant and a particulate material
AB
    An aerosol composition comprising a propellant and a first particulate material
     comprising particles having a median aerodynamic diameter within the range
     0.05 to 11 µm, such as a medicament suitable for pulmonary
     inhalation, and a second particulate material comprising particles
     having a median volume diameter within the range 15 to 200 μm. The presence
     of the second particulate material provides good suspension properties,
     particularly where the propellant is a hydrofluoroalkane. An aerosol
     inhaler was prepared comprising budesonide (median particle
     size 1.89 µm), lactose (median diam 90-63µm) and HFA-134a. The ease
     of dispersion and suspension quality of the inhaler was assessed
     and it was good.
AN
     1999:659213 HCAPLUS <<LOGINID::20100623>>
DN
     Aerosol composition comprising a propellant and a particulate material
     Dickinson, Paul Alfred; Warren, Simon John
     University College Cardiff Consultants Limited, UK; Cardiff Scintigraphics
     Limited
     PCT Int. Appl., 41 pp.
SO
     CODEN: PIXXD2
    Patent
LA English
FAN.CNT 1
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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	WO 9951205 W: AE, AL, DE, DK, JP, KE, MN, MW,	A1 AM, AT, AI EE, ES, F KG, KP, KI MX, NO, N	19991014 U, AZ, BA, I, GB, GD, R, KZ, LC, Z, PL, PT,	WO 1999-GB1019 BB, BG, BR, BY, CA, CI GE, GH, GM, HR, HU, II LK, LR, LS, LT, LU, L' RO, RU, SD, SE, SG, SI VN, YU, ZA, ZW	19990401 < H, CN, CU, CZ, D, IL, IN, IS, J, MD, MG, MK,
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	CA 2327336	A1	19991014	CA 1999-2327336	19990401 <
	CA 2327336 AU 9931620	C A	20080708	CA 1999-2327336 AU 1999-31620 BR 1999-9394 EP 1999-913508	19990401 <
	AU 761518	B2	20030605		
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	JP 2002510614	T	20020409	JP 2000-541977 CN 1999-806712 MX 2000-9660 ZA 2000-5374 US 2001-647331 US 2003-668840 <	19990401 <
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	ZA 2000005374	A	20020103	ZA 2000-5374	20001003 <
	US 6737044	B1	20040518	US 2001-647331	20010130 <
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PRAI	GB 1998-7232	A A	19980403	<	
	WO 1999-GB1019	W	19990401	<	
3007	US 2001-647331	A1	20010130	<	43 T
11001	Ominanta madadina a	010 00 11111	. IIIIII	LE IN LSUS DISPLAY FOR ES AVAILABLE FOR THIS !	
				THE RE FORMAT	
L13 TI				2010 ACS on STN aceutical inhalers	
AB	A powder for us	se in a dry	powder ph	armaceutical	
				nd additive material.	
				-adherent material and ight of active materia.	
				in the powder has been	
				ction of the active ma	erial. Leucine
	powder (I) (95			ticle size e (II) (having mass	
				g were mixed and aggle	omerated using a
	milling procedu	are for 6 h	, the aggl	omerated powder was the	∍n
		Turbohaler.	Each met	ered dose contained I	5, and II 500
AN DN	μg. 1997:207747 HO 126:203732	CAPLUS < <lo< td=""><td>GINID::201</td><td>00623>></td><td></td></lo<>	GINID::201	00623>>	
	126:39307a,393	l0a			
TI			wder pharm	aceutical inhalers	
IN PA	Staniforth, Jol		mont Itd	UK; Staniforth, John	dicholae
SO	PCT Int. Appl., CODEN: PIXXD2		messe near,	on, Stanfforth, John	.1010180
DT	Patent				
LA	English				
FAN.	CNT 2 PATENT NO.	KIND	DATE	APPLICATION NO	DATE
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PI	WO 9703649	A1	19970206	WO 1996-GB1783	19960724 <

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 26
             THERE ARE 26 CAPLUS RECORDS THAT CITE THIS RECORD (27 CITINGS)
RE.CNT 2
              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L13 ANSWER 44 OF 44 HCAPLUS COPYRIGHT 2010 ACS on STN
ΤI
    Carrier particles for use in dry powder inhalers
AB
    A powder for use in a dry powder inhaler
     includes active particles and carrier particles for carrying the active
     particles. The powder further includes additive material on the
     surface of the carrier particles to promote the release of the active
     particles from the carrier particles on actuation of the inhaler
     . The powder is such that the active particles are not liable
     to be released from the carrier particles before actuation of the
     inhaler. The inclusion of additive material in the powder
     gives an increased respirable fraction of the active material. Lactose
     particles (particle size 90-125 um) were mixed with leucine
     (diameter ≤150 µm), then with beclomethasone dipropionate to obtain
     powders for inhalation.
     1996:584137 HCAPLUS <<LOGINID::20100623>>
AN
DN
     125:204578
OREF 125:38113a,38116a
    Carrier particles for use in dry powder inhalers
    Staniforth, John Nicholas
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Patent LA English FAN.CNT 2

Co-Ordinated Drug Development Limited, UK

PCT Int. Appl., 73 pp. CODEN: PIXXD2

PA

SO

DT

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OSC.G 41 THERE ARE 41 CAPLUS RECORDS THAT CITE THIS RECORD (45 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT